SCIENCE AND TECHNOLOGY SURVEY 2003

Prepared for

SCIENCE WORLD AND SCIENCE COUNCIL OF BRITISH COLUMBIA

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Submitted by

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TABLE OF CONTENTS

EXECUTIVE SUMMARY i

1.0 INTRODUCTION 1

2.0 METHODOLOGY 2
- 2.1 Questionnaire Design 2
- 2.2 Survey Sample 2
- 2.3 Margin of Error 2
- 2.4 Survey Administration 3
- 2.5 Survey Analysis 4

3.0 SUMMARY OF FINDINGS 5
- 3.1 Science World 5
- 3.2 Science and Technology in BC 7
- 3.3 Attitudes 9

4.0 SURVEY RESPONSES 11

List of Appendices

Appendix One: Distribution of Responses
Appendix Two: Open-Ended and Other Comments
Appendix Three: Questionnaire

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EXECUTIVE SUMMARY

The Science Council of BC and Science World joined forces in the 1990s to jointly undertake general surveys of the BC population to determine attitudes to mutual science and technology issues. An initial survey was undertaken in 1994. The survey was followed – up five years later in 1999.

This 2003 survey represents the third Science Council/Science World survey collaboration and the second follow-up on the original 1994 survey.

Like the earlier surveys, the objectives of this survey are to:

- Measure trends in public attitudes towards science and technology
- Measure awareness of science and technology issues relevant to BC's economy
- Measure awareness of Science World; and
- Assess the impact of Science World and its programs.

Where feasible, comparisons were made of results of the 2003 survey with findings of the 1999 survey.

Methodology

The survey instrument was redesigned by Science Council and Science World in consultation with Pulse Research Limited and generally corresponded to those questions employed in the 1999 survey.

Like the 1999 survey, the 2003 survey polled 500 respondents from across British Columbia. To help ensure proportional representation of respondents, 65% of the sample was drawn from the Lower Mainland of BC, represented by Area Code 604. Thirty five percent (35%) of the sample was drawn from the remainder of BC, represented by Area Code 250. Within the sample of 500 respondents, therefore, 326 were drawn from Area Code 604 and 173 from Area Code 250.

A sample size of 500 residents provides a fair representation of responses of the entire population of British Columbia within + or – 4.38%, 19 times out of 20 (95% confidence level).

The general opinion poll was conducted by telephone from March 24 through April 6, 2003. All telephone surveys were administered by Pulse Research Limited and its Computer Assisted Telephone Interviewing (CATI) service.

Summary of Findings

Science World

1. Over four-fifths (82.0%) of respondents have ***heard of Science World***. Lower Mainland (Area Code 604) residents were more likely (86.8%) to have heard of Science World than were residents (77.8%) elsewhere in British Columbia.

   Awareness of Science World almost doubled between 1999 and 2003.

2. Of those who had heard of Science World, the most frequently cited (63.7%) ***product or service provided by Science World*** was science education. Approximately one-third (32.5%) of respondents indicated entertainment for kids and family. Special features, exhibitions and displays were acknowledged by 14.0% of respondents. Only 9.9% of respondents indicated the Imax theatre.

3. Of those aware of Science World, 28.5% of respondents had never ***visited Science World on their own***. Another 14.9% had visited Science World once. Over half (56.1%) of respondents had visited Science World two or more times, indicating a significant level of repeat visitation.

   A review of comprehensive totals suggests that the percentage of respondents indicating never having visited Science World or having visited once or twice has not changed significantly between 1999 and 2003. Respondents indicating repeat visitation (3 times or more) have increased from 31% in 1999 to 38.9% in 2003.

4. Nearly half (47.9%) of respondents aware of Science World agreed that ***Science World and its programs had positively influenced attitudes about science and technology.*** Over one-quarter (26.8%) of respondents indicated strong agreement with the statement. Approximately one in five (21.0%) of respondents indicated a neutral response to the statement.

   Between 1999 and 2003, there has been a significant decline in responses indicating some or strong disagreement with the statement.

5. Of respondents aware of Science World, 26.9% indicated that ***Science World and its programs had increased the respondent's interest in science and technology careers***. The number of respondents who strongly agreed with the statement was comparable to the number who agreed.

   Nearly one in five respondents (18.1%) provided a neutral response to the statement while 24.4% of respondents disagreed or strongly disagreed.

   The large percentage (23.2%) of respondents indicating refusal or non-applicability may reflect the age and occupational status of respondents. Inasmuch as most respondents would already have careers, and more than one-third of respondents had no children, the

statement may have been interpreted more from a perspective of career choice (and hence inapplicability) rather than from a perspective of curiosity about science and technology careers that might be imparted to children.

Between 1999 and 2003, there has been a significant increase in respondents indicating strong agreement with the statement and a large decline in responses indicating some or strong disagreement with the statement.

6. Over one-third (38.3%) of respondents familiar with Science World had ***no children.*** Slightly more than one quarter (26.5%) of respondents had two children. Another quarter (26.8%) of respondents had either two or three children.

7. Over half (51.8%) of respondents aware of Science World and having children had never ***attended Science World with a school group***. Nine (9.0%) of respondents had visited Science World once with a school group. Nearly one third (31.6%) of respondents with children had visited Science World twice or more.

Consistent with 1999 survey results, over half of all respondents had not visited Science World with a school group. A small increase between 1999 and 2003 in the number of respondents who had visited once or twice is within an acceptable margin of error. Between 1999 and 2003, approximately 20% of respondents had visited Science World once or twice.

8. Nearly one third (30.0%) of respondents aware of the Science Council and having children strongly agreed with the statement that ***Science World and its programs have positively influenced their children's attitudes about science and technology***. A further 22.1% of respondents indicated agreement with the statement. Nearly one in ten (9.1%) respondents indicated disagreement with the statement.

Between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement.

9. Respondents aware of Science World and having children agreed (44.8%) with the statement that ***"Science World and its programs have increased my children's interest in science or technology education."*** Nearly one-quarter (24.0%) strongly agreed with the statement. Neutral responses were provided by 17.7% of respondents. Disagreement with the statement was registered by 10.5% of respondents.

Between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement. Strong agreement with the statement increased form 17% in 1999 to 24.0% in 2003.

10. Nearly half (42.9%) of respondents aware of Science World and having children strongly agreed with the statement that ***"Science World has made an important contribution to science and technology education."*** A further 29.3% indicated agreement. Combined, 72.2% or respondents registered agreement with the statement.

11. Respondents aware of Science World and having children expressed agreement with the statement that "***It is very important that an institution like Science World is available to BC's youth to learn about science and technology.***" Respondents indicating strong agreement constituted 75.7 % of responses.

With this statement, there appears to have been little change in public attitude between 1999 and 2003.

Science and Technology in BC

1. Over half (59.0%) of respondents indicated that science and technology was very important to the ***present growth and development*** of BC's people, industries and economy. Another 29.4% indicated high importance. Combined, 88.4% of respondents indicated a high level of importance or greater.

   Year 2003 survey results suggest that respondents today consider science and technology more important to the present growth and development of the Province than in previous years. Just as many respondents in 2003 as in previous years considered science and technology as "very important." However, by 2003 an increasing percentage of respondents responded "important", and decreasing percentages described science and technology as less or not important than in previous years. By the year 2003, fewer people appear to be neutral on the subject.

2. The importance of science and technology to the ***future growth and development*** of BC's people, industries and economy was considered to be important or very important by 91.0% of respondents. Two-thirds (66.8%) of respondents considered science and technology to be very important.

   Compared to Question 1, the importance of science and technology to the present growth and development of the Province, a larger percentage of respondents felt that science and technology was very important to the future growth and development of the Province.

   Nevertheless, compared to the results of surveys in previous years, the percentage of respondents replying "very important" has steadily declined since 1994, while the percentage of neutral to somewhat important has increased steadily.

3. When respondents were asked to name which ***BC-based organizations or institutions*** come to mind when thinking of science and technology, the BC Technology Industries Association was named by 12.1% of respondents. This was the most frequently named organization. Ballard Power was the second most frequently named organization (10.2% of respondents). The Science Council of BC was named by 5.0% of respondents, third among known organizations and institutions.

   Over one-third (34.5%) of respondents were unable to name any BC based science and technology organization.

4. Four of five (80.4%) of respondents indicated ***no familiarity with the Science Council*** of British Columbia.

5. When respondents were asked to name three ***science and technology-based sectors*** on which BC should focus its research and development efforts, the three most frequently cited sectors were: Energy and Alternative Fuels (74.2%), Life Sciences and Biotechnology (54.0%), and Environment (49.6%).

Two other industry sectors also received significant attention. These were Marine sciences (40.4%), and Information, Communications Technologies (39.2%).

6. Of the factors perceived to be the ***three biggest obstacles to the growth*** of BC's science and technology industries, an employee skill shortage was named by nearly two-thirds (64.3%) of respondents. All other factors figured less prominently. Nearly half (46.5%) of respondents indicated cost of living as the second largest obstacle to growth. The third obstacle, named by over one-third (37.3%) of respondents was the lack of start-up funding.

   Labour costs and the lack of research facilities were named by approximately 30% (from 28.6% - 31.6%) of respondents. Ranking sixth and seventh as obstacles were personal and corporate tax rates, cited by approximately 25% of respondents.

   Disaggregation according to Area Code revealed little variation according to place of residence. Nevertheless, residents outside of the Lower Mainland were slightly more likely (19.2%) to consider education as an obstacle to the growth of BC's science and technology industries than were residents in the Lower Mainland's Area Code 604 (16.6%).

7. Respondents indicated by a very large margin (66.0%) that the Internet was the first choice in seeking ***information about science and technology*** in BC. All other sources of information ranked much lower with libraries at 25.7% and the media at 13.6%. "Other" sources of information, cited by 14.6% of respondents reflected a wide range of alternatives including, among others, universities and other educational institutions, Science World, and research centres. Universities, colleges, technical institutes and schools ranked prominently among the "other" category.

8. Of the ***places, facilities, or attractions*** in BC that come to mind when thinking of science and technology, 62.1% of respondents indicated Science World. "Other" and "None/Don't Know" were indicated by 51.3% of respondents.

   "Other" responses were varied. Universities and educational institutions figured prominently in the responses, but responses included businesses (such as Ballard, BC Hydro), research centres (BC Cancer Centre, Triumf, Bamfield Marine Station), universities, tourism attractions (Butchart Gardens, museums, hydro dams), and generic descriptions (ocean, forestry, oil fields), and others.

   Respondents in Area Code 604 were more likely to name Science World as a science and technology attraction than were residents elsewhere in BC. In the Lower Mainland (Area Code 604), 48.6% of respondents named Science World, while 35.1% of residents elsewhere in BC named Science World as a place when they thought of science and technology.

Attitudes

1. Over half (55.5%) of all respondents indicated strong agreement that "***Public funds should be provided to encourage the development of scien.. ., technology, and innovation.***" A further 25.1% registered some agreement with the statement.

   Disagreement with the statement was indicated by 5.2% of all respondents.

   Between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement and there has been a notable increase in responses indicating strong agreement with the statement.

2. Slightly more than half (53.4%) of all respondents strongly agreed that BC needs a more ***technologically skilled workforce***. A further 24.7% indicated some agreement with the statement.

   One in ten respondents (10.9%) indicated neutrality on the statement while 5.8% of all respondents indicated some level of disagreement with the statement.

   Between 1999 and 2003, there has been a decline in responses indicating strong agreement with the statement. There has also been a notable increase in "don't know" responses between 1999 and 2003.

3. Nearly three-quarters (73.8%) of all respondents indicated some level of agreement with the statement that ***science and technology is making life easier and better***. Respondents strongly agreeing with the statement accounted for 45.3% of all responses.

   Approximately one respondent in five (21.1%) indicated a neutral response, but only 3.8% indicated some level of disagreement with the statement.

   Disaggregation of responses between Area Codes 604 and 250 reveal that residents of the Lower Mainland are much more likel to agree (48.2%) with the statement than are residents elsewhere in BC (39.9%). Similarly, many fewer residents (0.9%) in Area Code 604 are likely to "strongly disagree" with the statement than are residents outside the Lower Mainland (3.5%).

1.0 INTRODUCTION

The Science Council of BC and Science World joined forces in the 1990s to jointly undertake general surveys of the BC population to determine attitudes to mutual science and technology issues. An initial survey was undertaken in 1994. The survey was followed – up five years later in 1999.

This survey represents the third Science Council/Science World survey collaboration and the second follow-up on the original 1994 survey.

Like the earlier surveys, the objectives of this survey are to:

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- Measure awareness of science and technology issues relevant to BC's economy
- Measure awareness of Science World; and
- Assess the impact of Science World and its programs.

Where feasible, comparisons were made of results of the 2003 survey with findings of the 1999 survey.

2.0 METHODOLOGY

2.1 Questionnaire Design

The survey instrument was redesigned by Science Council and Science World in consultation with Pulse Research Limited and generally corresponded to those questions employed in the 1999 survey. No changes were made to questions relating to Science World. Some adjustments were made to questions relating to Science Council to achieve greater clarity and to manage open-ended responses. In total, respondents were asked twenty-six questions, including four demographic questions.

2.2 Survey Sample

Like the 1999 survey, the 2003 survey polled 500 respondents from across British Columbia. To help ensure proportional representation of respondents, 65% of the sample was drawn from the Lower Mainland of BC, represented by Area Code 604. Thirty five percent (35%) of the sample was drawn from the remainder of BC, represented by Area Code 250. Within the sample of 500 respondents, therefore, 326 were drawn from Area Code 604 and 173 from Area Code 250.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	604 Lower mainland	326	65.3	65.3	65.3
	250 Rest of BC	173	34.7	34.7	100.0
	Total	500	100.0	100.0	

2.3 Margin of Error

A sample size of 500 residents provides a fair representation of responses of the entire population of British Columbia within + or – 4.38%, 19 times out of 20 (95% confidence level). This means that if 64% of respondents have indicated they feel an employee skill shortage is one of the three biggest obstacles to the growth of BC's science and technology industries, the reader can assume, with 95% confidence, that between 59.6% and 68.4% of all the residents in British Columbia also perceive an employee skill shortage is one of the major obstacles.

2.4 Survey Administration

The general opinion poll was conducted by telephone from March 24 through April 6, 2003. All telephone surveys were administered by Pulse Research Limited and its Computer Assisted Telephone Interviewing (CATI) service.

British Columbia Total Responses:	**Count**
Accept	500
Decline	1152
Fax/Not in service	880
Not Qualified	336
Other	4900
Total	7768

Lower Mainland: Area Code 604 Responses:	**Count**
Accept	325
Decline	728
Fax/Not in service	555
Not Qualified	241
Other	2641
Total	4,490

Other British Columbia: Area Code 250 Responses:	**Count**
Accept	175
Decline	424
Fax/Not in service	325
Not Qualified	95
Other	2259
Total	3278

NOTE
Decline: Not interested, too busy, hung up
Not Qualified: Business Number, Duplicate Number, Hard of Hearing, Language Barrier, and Elderly
Other: Busy, No Answer, Answering Machine, Not Available

2.5 Survey Analysis

At the completion of the survey administration, all data was input into a Statistical Package for the Social Sciences (SPSS) data file. A series of computer checks were made to ensure that the data was consistent and suitable for statistical analysis.

The frequency distribution results of all questions were computed. Where appropriate, cross tabulations were performed with to identify attitudes and opinions specific to a particular region (lower mainland versus the rest of British Columbia). Open-ended questions were cleaned and coded, and summarized as appropriate.

3.0 SUMMARY OF FINDINGS

3.1 Science World

1. Over four-fifths (82.0%) of respondents have ***heard of Science World***. Lower Mainland (Area Code 604) residents were more likely (86.8%) to have heard of Science World than were residents (77.8%) elsewhere in British Columbia.

   Awareness of Science World almost doubled between 1999 and 2003.

2. Of those who had heard of Science World, the most frequently cited (63.7%) ***product or service provided by Science World*** was science education. Approximately one-third (32.5%) of respondents indicated entertainment for kids and family. Special features, exhibitions and displays were acknowledged by 14.0% of respondents. Only 9.9% of respondents indicated the Imax theatre.

3. Of those aware of Science World, 28.5% of respondents had never ***visited Science World on their own***. Another 14.9% had visited Science World once. Over half (56.1%) of respondents had visited Science World two or more times, indicating a significant level of repeat visitation.

   A review of comprehensive totals suggests that the percentage of respondents indicating never having visited Science World or having visited once or twice has not changed significantly between 1999 and 2003. Respondents indicating repeat visitation (3 times or more) have increased from 31% in 1999 to 38.9% in 2003.

4. Nearly half (47.9%) of respondents aware of Science World agreed that ***Science World and its programs had positively influenced attitudes about science and technology.*** Over one-quarter (26.8%) of respondents indicated strong agreement with the statement. Approximately one in five (21.0%) of respondents indicated a neutral response to the statement.

   Between 1999 and 2003, there has been a significant decline in responses indicating some or strong disagreement with the statement.

5. Of respondents aware of Science World, 26.9% indicated that ***Science World and its programs had increased the respondent's interest in science and technology careers***. The number of respondents who strongly agreed with the statement was comparable to the number who agreed.

   Nearly one in five respondents (18.1%) provided a neutral response to the statement while 24.4% of respondents disagreed or strongly disagreed.

The large percentage (23.2%) of respondents indicating refusal or non-applicability may reflect the age and occupational status of respondents. Inasmuch as most respondents would already have careers, and more than one-third of respondents had no children, the statement may have been interpreted more from a perspective of career choice (and hence inapplicability) rather than from a perspective of curiosity about science and technology careers that might be imparted to children.

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7. Over half (51.8%) of respondents aware of Science World and having children had never ***attended Science World with a school group***. Nine (9.0%) of respondents had visited Science World once with a school group. Nearly one third (31.6%) of respondents with children had visited Science World twice or more.

   Consistent with 1999 survey results, over half of all respondents had not visited Science World with a school group. A small increase between 1999 and 2003 in the number of respondents who had visited once or twice is within an acceptable margin of error. Between 1999 and 2003, approximately 20% of respondents had visited Science World once or twice.

8. Nearly one third (30.0%) of respondents aware of the Science Council and having children strongly agreed with the statement that ***Science World and its programs have positively influenced their children's attitudes about science and technology***. A further 22.1% of respondents indicated agreement with the statement. Nearly one in ten (9.1%) respondents indicated disagreement with the statement.

   Between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement.

9. Respondents aware of Science World and having children agreed (44.8%) with the statement that ***"Science World and its programs have increased my children's interest in science or technology education."*** Nearly one-quarter (24.0%) strongly agreed with the statement. Neutral responses were provided by 17.7% of respondents. Disagreement with the statement was registered by 10.5% of respondents.

   Between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement. Strong agreement with the statement increased form 17% in 1999 to 24.0% in 2003.

10. Nearly half (42.9%) of respondents aware of Science World and having children strongly agreed with the statement that ***"Science World has made an important contribution to science and technology education."*** A further 29.3% indicated agreement. Combined, 72.2% or respondents registered agreement with the statement.

11. Respondents aware of Science World and having children expressed agreement with the statement that ***"It is very important that an institution like Science World is available to BC's youth to learn about science and technology."*** Respondents indicating strong agreement constituted 75.7 % of responses.

With this statement, there appears to have been little change in public attitude between 1999 and 2003.

3.2 Science and Technology in BC

1. Over half (59.0%) of respondents indicated that science and technology was very important to the ***present growth and development*** of BC's people, industries and economy. Another 29.4% indicated high importance. Combined, 88.4% of respondents indicated a high level of importance or greater.

Year 2003 survey results suggest that respondents today consider science and technology more important to the present growth and development of the Province than in previous years. Just as many respondents in 2003 as in previous years considered science and technology as "very important." However, by 2003 an increasing percentage of respondents responded "important", and decreasing percentages described science and technology as less or not important than in previous years. By the year 2003, fewer people appear to be neutral on the subject.

2. The importance of science and technology to the ***future growth and development*** of BC's people, industries and economy was considered to be important or very important by 91.0% of respondents. Two-thirds (66.8%) of respondents considered science and technology to be very important.

Compared to Question 1, the importance of science and technology to the present growth and development of the Province, a larger percentage of respondents felt that science and technology was very important to the future growth and development of the Province.

Nevertheless, compared to the results of surveys in previous years, the percentage of respondents replying "very important" has steadily declined since 1994, while the percentage of neutral to somewhat important has increased steadily.

3. When respondents were asked to name which ***BC-based organizations or institutions*** come to mind when thinking of science and technology, the BC Technology Industries Association was named by 12.1% of respondents. This was the most frequently named organization. Ballard Power was the second most frequently named organization (10.2% of respondents). The Science Council of BC was named by 5.0% of respondents, third among known organizations and institutions.

   Over one-third (34.5%) of respondents were unable to name any BC based science and technology organization.

4. Four of five (80.4%) of respondents indicated ***no familiarity with the Science Council*** of British Columbia.

5. When respondents were asked to name three ***science and technology-based sectors*** on which BC should focus its research and development efforts, the three most frequently cited sectors were: Energy and Alternative Fuels (74.2%), Life Sciences and Biotechnology (54.0%), and Environment (49.6%).

   Two other industry sectors also received significant attention. These were Marine sciences (40.4%), and Information, Communications Technologies (39.2%).

6. Of the factors perceived to be the ***three biggest obstacles to the growth*** of BC's science and technology industries, an employee skill shortage was named by nearly two-thirds (64.3%) of respondents. All other factors figured less prominently. Nearly half (46.5%) of respondents indicated cost of living as the second largest obstacle to growth. The third obstacle, named by over one-third (37.3%) of respondents was the lack of start-up funding.

   Labour costs and the lack of research facilities were named by approximately 30% (from 28.6% - 31.6%) of respondents. Ranking sixth and seventh as obstacles were personal and corporate tax rates, cited by approximately 25% of respondents.

   Disaggregation according to Area Code revealed little variation according to place of residence. Nevertheless, residents outside of the Lower Mainland were slightly more likely (19.2%) to consider education as an obstacle to the growth of BC's science and technology industries than were residents in the Lower Mainland's Area Code 604 (16.6%).

7. Respondents indicated by a very large margin (66.0%) that the Internet was the first choice in seeking ***information about science and technology*** in BC. All other sources of information ranked much lower with libraries at 25.7% and the media at 13.6%. "Other" sources of information, cited by 14.6% of respondents reflected a wide range of alternatives including, among others, universities and other educational institutions, Science World, and research centres. Universities, colleges, technical institutes and schools ranked prominently among the "other" category.

8. Of the ***places, facilities, or attractions*** in BC that come to mind when thinking of science and technology, 62.1% of respondents indicated Science World. "Other" and "None/Don't Know" were indicated by 51.3% of respondents.

   "Other" responses were varied. Universities and educational institutions figured prominently in the responses, but responses included businesses (such as Ballard, BC Hydro), research centres (BC Cancer Centre, Triumf, Bamfield Marine Station), universities, tourism attractions (Butchart Gardens, museums, hydro dams), and generic descriptions (ocean, forestry, oil fields), and others.

   Respondents in Area Code 604 were more likely to name Science World as a science and technology attraction than were residents elsewhere in BC. In the Lower Mainland (Area Code 604), 48.6% of respondents named Science World, while 35.1% of residents elsewhere in BC named Science World as a place when they thought of science and technology.

3.3 Attitudes

1. Over half (55.5%) of all respondents indicated strong agreement that "***Public funds should be provided to encourage the development of science, technology, and innovation.***" A further 25.1% registered some agreement with the statement.

   Disagreement with the statement was indicated by 5.2% of all respondents.

   Between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement and there has been a notable increase in responses indicating strong agreement with the statement.

2. Slightly more than half (53.4%) of all respondents strongly agreed that BC needs a more ***technologically skilled workforce***. A further 24.7% indicated some agreement with the statement.

   One in ten respondents (10.9%) indicated neutrality on the statement while 5.8% of all respondents indicated some level of disagreement with the statement.

   Between 1999 and 2003, there has been a decline in responses indicating strong agreement with the statement. There has also been a notable increase in "don't know" responses between 1999 and 2003.

3. Nearly three-quarters (73.8%) of all respondents indicated some level of agreement with the statement that ***science and technology is making life easier and better***. Respondents strongly agreeing with the statement accounted for 45.3% of all responses.

   Approximately one respondent in five (21.1%) indicated a neutral response, but only 3.8% indicated some level of disagreement with the statement.

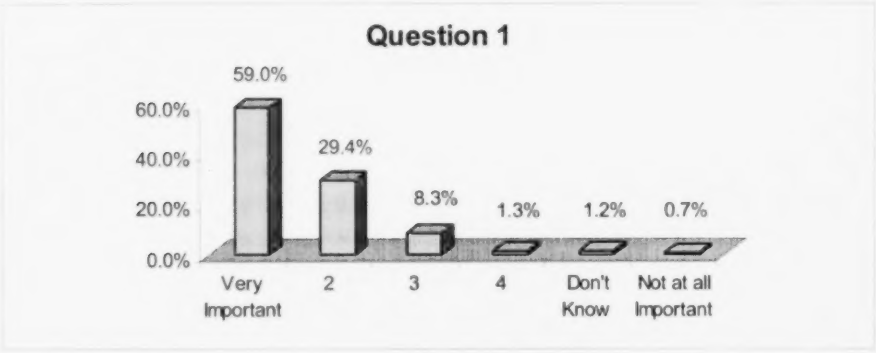
Disaggregation of responses between Area Codes 604 and 250 reveal that residents of the Lower Mainland are much more likely to agree (48.2%) with the statement than are residents elsewhere in BC (39.9%). Similarly, many fewer residents (0.9%) in Area Code 604 are likely to "strongly disagree" with the statement than are residents outside the Lower Mainland (3.5%).

4.0 SURVEY RESPONSES

Q1. On a scale of 1 to 5, how important are science and technology to the PRESENT growth and development of B.C.'s people, industries, and economy?

Q1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	295	59.0	59.0	59.0
	2	147	29.4	29.4	88.4
	3	42	8.3	8.3	96.8
	4	7	1.3	1.3	98.1
	Not At All Important	3	.7	.7	98.8
	Don't Know	6	1.2	1.2	100.0
	Total	500	100.0	100.0	



Over half (59.0%) of respondents indicated that science and technology was very important to the present growth and development of BC's people, industries and economy. Another 29.4% indicated high importance. Combined, 88.4% of respondents indicated a high level of importance or greater.

Comparison with Results of 1999 Science World Survey

A question similar to Question 1 was asked in the 1999 Science World Survey. The 1999 Survey Report[1] also cited results from a comparable question asked in a 1994 survey.

[1] Science World, Report on Science World General Population Survey, prepared by Groundworks Strategic Marketing Solutions, 1999.

Comparative results follcw:

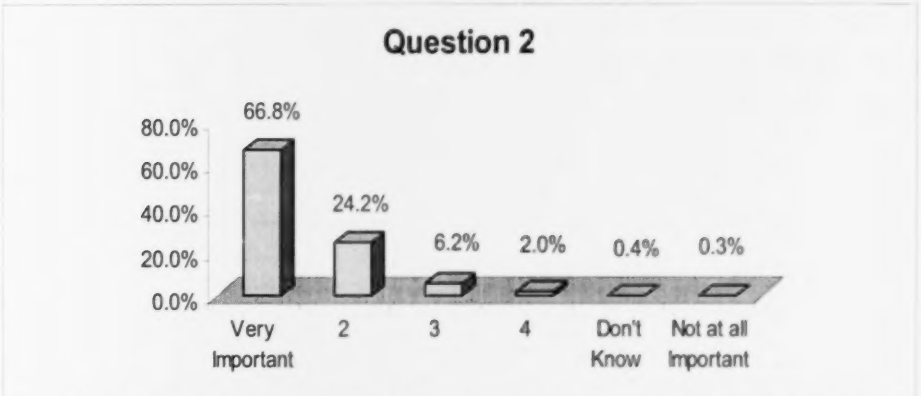
Importance of Science and Technology Today/at Present	2003 Total	1999 Total	1994 Total
	n = 500 %	n = 500 %	n = 501 %
Very Important	59.0	60	60
	29.4	25	26
	8.3	10	11
	1.3	3	2
Not at all Important	0.7	2	-
Don't Know	1.2	-	1

Year 2003 survey results suggest that respondents today consider science and technology more important to the present growth and development of the Province than in previous years. Just as many respondents in 2003 as in previous years considered science and technology as "very important." However, by 2003 an increasing percentage of respondents responded "important", and decreasing percentages described science and technology as less or not important than in previous years. By the year 2003, fewer people appear to be neutral on the subject.

Q2. Using the same scale of 1 to 5, how important will science and technology be to the FUTURE growth and development of B.C.'s people, industries, and economy?

Q2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	334	66.8	66.8	66.8
	2	121	24.2	24.2	91.0
	3	31	6.2	6.2	97.2
	4	10	2.0	2.0	99.2
	Not At All Important	2	.3	.3	99.6
	Don't Know	2	.4	.4	100.0
	Total	500	100.0	100.0	



The importance of science and technology to the future growth and development of BC's people, industries and economy was considered to be important or very important by 91.0% of respondents. Two-thirds (66.8%) of respondents considered science and technology to be very important.

Comparison with Results of 1999 Science World Survey

A question similar to Question 2 was asked in the 1999 Science World Survey. The 1999 Survey Report[2] also cited results from a comparable question asked in a 1994 survey.

Comparative results follow:

Importance of Science and Technology in the Future	2003 Total n = 500 %	1999 Total n = 500 %	1994 Total N = 501 %
Very Important	66.8	73.0	77.0
	24.2	19.0	17.0
	6.2	4.0	3.0
	2.0	1.0	2.0
Not at all Important	0.3	1.0	0.0
Don't Know	0.4	0.0	1.0

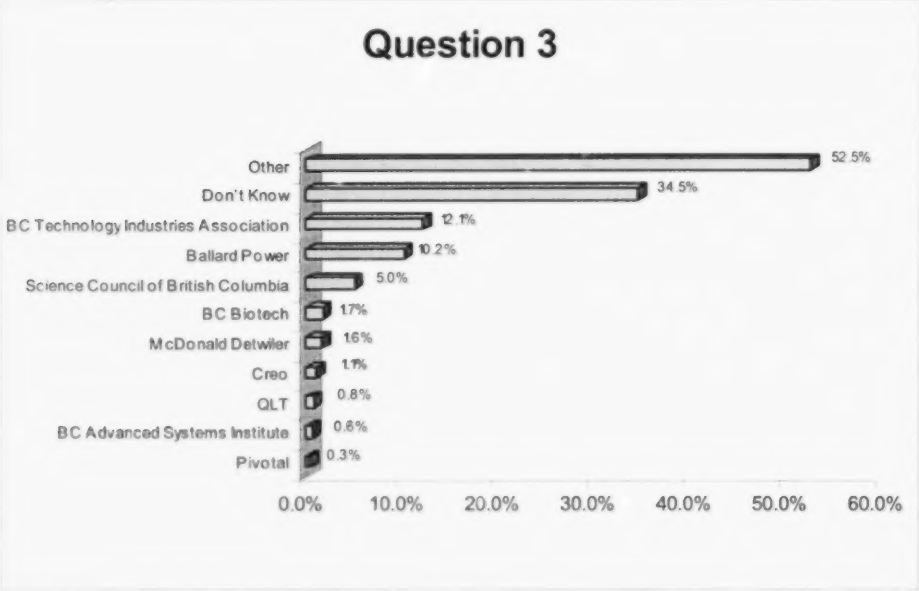
Compared to Question 1 and the importance of science and technology to the present growth and development of the Province, a larger percentage of respondents felt that science and technology was very important to the future growth and development of the Province.

Nevertheless, compared to the results of surveys in previous years, the percentage of respondents replying "very important" has steadily declined since 1994, while the percentage of neutral to somewhat important has increased steadily.

[2] Science World, Report on Science World General Population Survey, prepared by Groundworks Strategic Marketing Solutions, 1999.

Q3. Which BC-based organizations or institutions come to mind when you think of science and technology?

Q3	Count	% of Cases
Science Council of British Columbia	25	5.0 %
BC Technology Industries Association	61	12.1
Pivotal	1	0.3
Ballard Power	51	10.2
BC Biotech	8	1.7
Creo	6	1.1
BC Advanced Systems Institute	3	0.6
McDonald Detwiller	8	1.6
QLT	4	0.8
Other	262	52.5
Don't Know	172	34.5
Total	601	120.4



When respondents were asked to name which BC-based organizations or institutions come to mind when thinking of science and technology, the BC Technology Industries Association was named by 12.1% of respondents. This was the most frequently named organization. Ballard Power was the second most frequently named organization (10.2% of respondents). The Science Council of BC was named by 5.0% of respondents.

Few respondents named any BC based science and technology business. Over one-third (34.5%) of respondents were unable to name any BC based science and technology organization.

Nearly three-quarters (71.4%) of all respondents indicated a research theme or area (such as medical research or cancer research or marine science) or organization names or approximations of names. These respondents numbered 429 of the 601 responses.

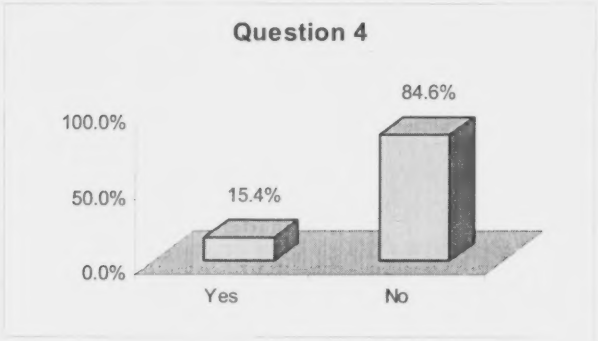
Over half (52.5%) of respondents indicated an organization "other" than those listed in the survey. The "other" response included a variety of research areas, such as medical research, as well as the names of organizations. The names of organizations were often approximate but the approximation of names was sufficiently close to actual or real names to permit the identification of specific organizations. Accordingly, 11 respondents (2.6% of the 429 responses) indicated the BC Cancer Research Centre and Science World was named by 40 respondents (9.3% of the 429 responses).

Universities, colleges and technical institutes were named by 130 respondents (30.3% of the 429 respondents). The most frequently named institutions were the University of British Columbia (69 responses), Simon Fraser University (32 responses) and the BC institute of Technology (33 responses).

Q4. Are you familiar with the Science Council of British Columbia?

Q4

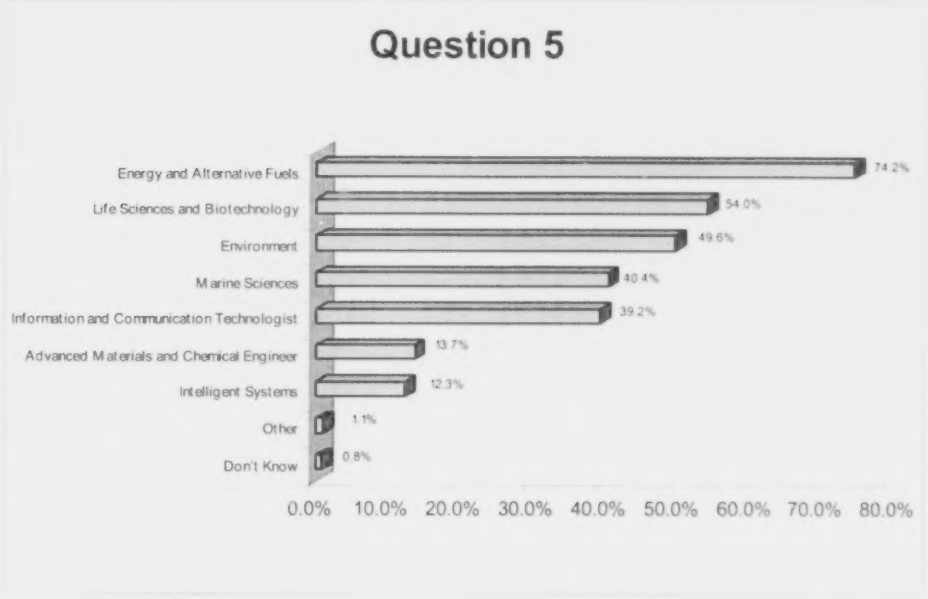
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	73	14.6	15.4	15.4
	No	402	80.4	84.6	100.0
	Total	475	95.0	100.0	
Missing	System	25	5.0		
Total		500	100.0		



Four of five (80.4%) of respondents indicated no familiarity with the Science Council of British Columbia.

Q5. Which THREE of the following science and technology-based industries do you think BC should focus its research and development efforts to obtain the greatest benefits for the province?

Q5	Count	% of Cases
Life Sciences and Biotechnology	270	54.0 %
Information and Communication Technologist	196	39.2
Energy and Alternative Fuels	371	74.2
Advanced Materials and Chemical Engineer	68	13.7
Marine Sciences	202	40.4
Environment	248	49.6
Intelligent Systems	61	12.3
Other	5	1.1
Don't Know	4	0.8
Total	1425	285.3



When respondents were asked to name three science and technology-based sectors on which BC should focus its research and development efforts, the three most frequently cited sectors were:

Energy and Alternative Fuels	(74.2%)
Life sciences and Biotechnology	(54.0%), and
Environment	(49.6%)

Two other industry sectors also received significant attention. These were:

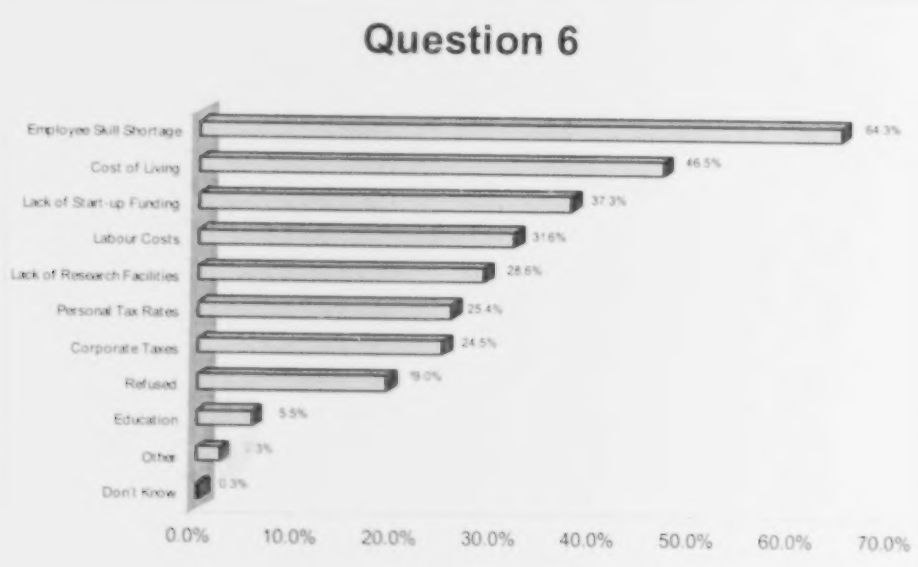
Marine sciences	(40.4%), and
Information, Communications Technologies	(39.2%)

Argument can be made that the four priority sectors all relate to dimensions of environment and health.

No apparent differences in priorities appear when respondents are disaggregated according to place of residence. Responses from residents in Area Code 604 and 250 were comparable.

Q6. Which of the following factors do you perceive to be the THREE biggest obstacles to the growth of BC's science and technology industries?

Q6	Count	% of Cases
Employee Skill Shortage	321	64.3
Lack of Start-up Funding	186	37.3
Lack of Research Facilities	143	28.6
Corporate Taxes	123	24.5
Personal Tax Rates	127	25.4
Labour Costs	158	31.6
Cost of Living	233	46.5
Education	27	5.5
Other	12	2.3
Don't Know	1	0.3
Refused	95	19.0
Total	1425	285.3



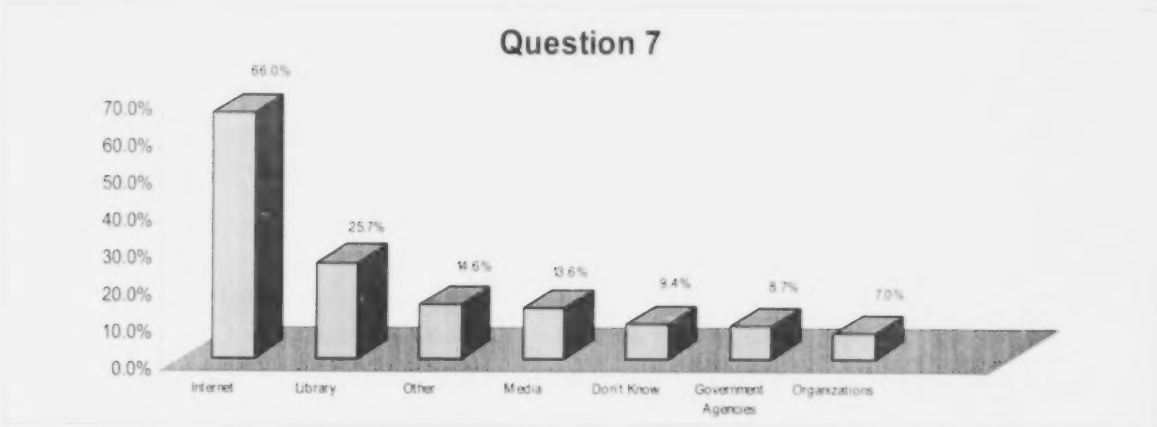
Of the factors perceived to be the three biggest obstacles to the growth of BC's science and technology industries, an employee skill shortage was named by nearly two-thirds (64.3%) of respondents. All other factors figured less prominently. Nearly half (46.5%) of respondents indicated cost of living as the second largest obstacle to growth. The third obstacle, named by over one-third (37.3%) of respondents was the lack of start-up funding.

Labour costs and the lack of research facilities were named by approximately 30% (from 28.6% - 31.6%) of respondents. Ranking sixth and seventh as obstacles were personal and corporate tax rates, cited by approximately 25% of respondents.

Disaggregation according to Area Code revealed little variation according to place of residence. Nevertheless, residents outside of the Lower Mainland were slightly more likely (19.2%) to consider education as an obstacle to the growth of BC's science and technology industries than were residents in the Lower Mainland's Area Code 604 (16.6%).

Q7. Where would you look for information about science and technology in BC?

Q7	Count	% of Cases
Government Agencies	43	8.7
Organizations	35	7.0
Media	68	13.6
Internet	330	66.0
Business or Industry Associations	7	1.4
Library	128	25.7
Other	73	14.6
Don't Know	47	9.4
Total	731	146.4



Respondents indicated by a very large margin (66.0%) that the Internet was the first choice in seeking information about science and technology in BC. All other sources of information ranked much lower with libraries at 25.7% and the media at 13.6%. "Other" sources of information, cited by 14.6% of respondents reflected a wide range of alternatives including, among others, universities and other educational institutions, Science World, and research centres. Universities, colleges, technical institutes and schools ranked prominently among the "other" category.

Comparison with Results of 1999 Science World Survey

A question similar to Question 7 was asked in the 1999 Science World Survey.

Comparative results follow:

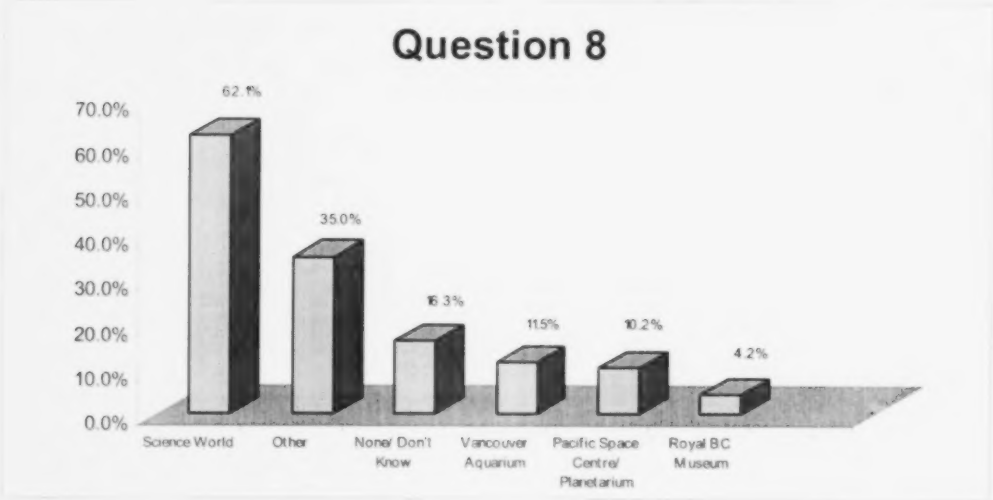
Where would you look for information about science and technology in BC?

Sources of Information	2003 n = 500 %	1999 n = 500 %
Internet	66.0	35.0
Libraries (various)	25.7	28.0
Universities	0.0	25.0
Science World	0.0	10.0
Organizations	7.0	0.0
Government	8.7	8.0
Vancouver Sun	0.0	4.0
Media	13.6	0.0
Yellow Pages	0.0	3.0
Science, technical magazines	0.0	3.0
Business, Industry Associations	1.4	0.0
Other	14.6	15.0
Don't Know	9.4	16.0

Since 1999, the Internet has achieved increasing importance as a means of accessing information. Lack of comparability in selections of information sources limits comparison between 2003 and 1999 responses. Government agencies and libraries appear to be holding their own as sources of information. An examination of "other" responses indicates that universities remain an important source of information on science and technology, although universities were not named as commonly as in 1999.

Q8. Which places, facilities, or attractions in BC come to mind when you think of science and technology?

Q8	Count	% of Cases
Science World	310	62.1 %
Pacific Space Centre/Planetarium	51	10.2
Royal BC Museum	21	4.2
Vancouver Aquarium	58	11.5
Other	175	35.0
None/Don't Know	81	16.3
Refused	1	0.3
Total	697	139.6



Of the places, facilities, or attractions in BC that come to mind when thinking of science and technology, 62.1% of respondents indicated Science World. "Other" and "None/Don't Know" were indicated by 51.3% of respondents.

"Other" responses were varied. Universities and educational institutions figured prominently in the responses, but responses included businesses (such as Ballard, BC Hydro), research centres (BC Cancer Centre, Triumf, Bamfield Marine Station), universities, tourism attractions (Butchart Gardens, museums, hydro dams), and generic descriptions (ocean, forestry, oil fields), and others.

Respondents in Area Code 604 were more likely to name Science World as a science and technology attraction than were residents elsewhere in BC. In the Lower Mainland (Area Code 604), 48.6% of respondents named Science World, while 35.1% of residents elsewhere in BC named Science World as a place when they thought of science and technology.

Comparison with Results of 1999 Science World Survey

Question 8 was asked in the 1999 Science World Survey. The 1999 Survey Report[3] also cited results from a comparable question asked in a 1994 survey.

Comparative results follow:

Place or Attraction	2003 Total	1999 Total	1994 Total
	n = 697	n = 500	n = 501
Science World/Science Centre	310	43	0
Pacific Space Centre/Planetarium	51	8	0
Museums (various)	21	7	0
UBC	0	7	0
Disneyland/world	0	5	0
NASA	0	5	3
Universities (other various)	0	5	16
IMAX	0	3	0
Private corporations (various)	0	3	0
Science centres (various)	0	3	0
Science fairs/exhibits (various)	0	3	0
Other	175	12	17
None/none in particular	81	18	10
Totals	697	122	46

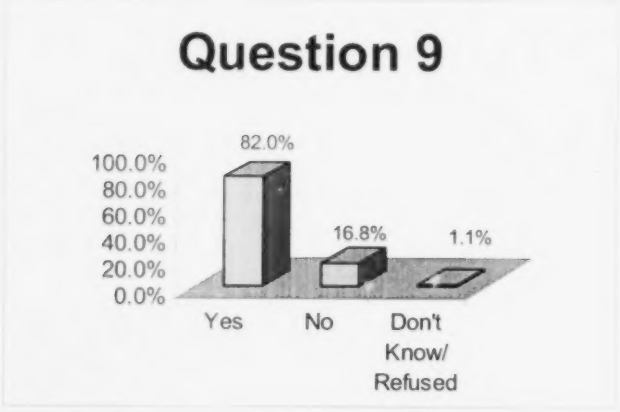
Differences in the list of alternative places or attractions between 1999 and 2003, and the significant overlap in attractions listed in 1999 preclude meaningful comparison of the results of the 1999 and 2003 surveys.

[3] Science World, Report on Science World General Population Survey, prepared by Groundworks Strategic Marketing Solutions, 1999.

Q9. Have you ever heard of Science World?

Q9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	155	31.1	82.0	82.0
	No	32	6.4	16.8	98.9
	Don't Know/Refused	2	.4	1.1	100.0
	Total	190	37.9	100.0	
Missing	System	310	62.1		
Total		500	100.0		



Over four-fifths (82.0%) of respondents had heard of Science World.

Lower Mainland (Area Code 604) residents were more likely (86.8%) to have heard of Science World than were residents (77.8%) elsewhere in British Columbia.

Crosstab

			Q9			
			Yes	No	Don't Know/Refused	Total
RECODE	604 Lower mainland	Count	79	11	1	91
		% within RECODE	86.8%	12.1%	1.1%	100.0%
		% within Q9	50.6%	34.4%	50.0%	47.9%
	250 Rest of BC	Count	77	21	1	99
		% within RECODE	77.8%	21.2%	1.0%	100.0%
		% within Q9	49.4%	65.6%	50.0%	52.1%
Total		Count	156	32	2	190
		% within RECODE	82.1%	16.8%	1.1%	100.0%
		% within Q9	100.0%	100.0%	100.0%	100.0%

Comparison with Results of 1999 Science World Survey

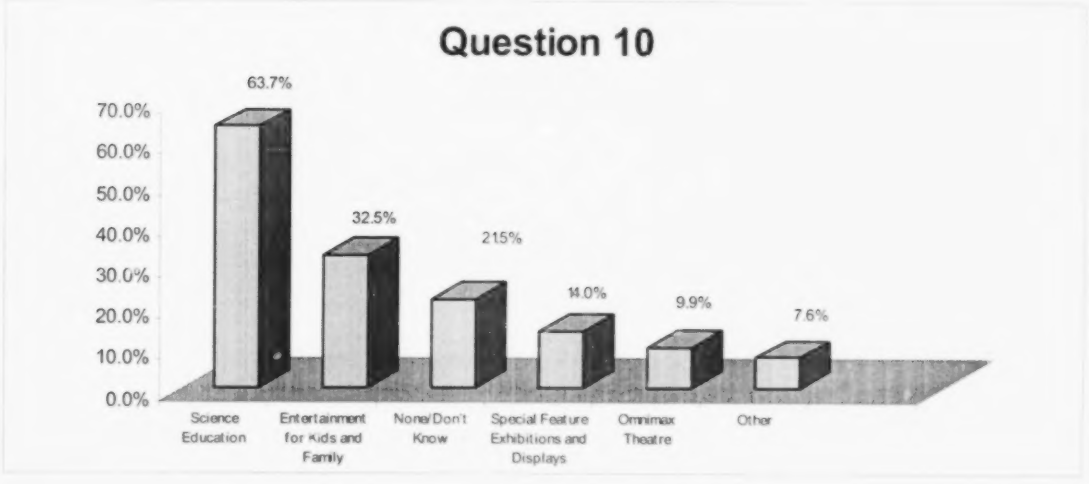
A question similar to Question 9 was asked in the 1999 Science World Survey. Comparative results follow:

Awareness	2003 n = 500 %	1999 n = 500 %
Awareness unaided	82.0	43.0
Awareness aided	0.0	44.0
Not aware	16.8	13.0
Don't Know/Refused	1.1	0.0

Awareness of Science World almost doubled between 1999 and 2003.

Q10. What types of products and/or services does Science World provide to the public?

Q10	Count	% of Cases
Tourist Attraction	20	4.3 %
Science Education	296	63.7
Entertainment for Kids and Family	151	32.5
Omnimax Theatre	46	9.9
Special Feature Exhibitions and Displays	65	14.0
Other	35	7.6
None/Don't Know	100	21.5
Total	714	153.4



Of those who had heard of Science World, the most frequently cited (63.7%) product or service provided by Science World was science education. Approximately one-third (32.5%) of respondents indicated entertainment for kids and family. Special features, exhibitions and displays were acknowledged by 14.0% of respondents. Only 9.9% of respondents indicated the Imax theatre.

One respondent in five (21.5%) indicated lack of awareness of Science World products and services.

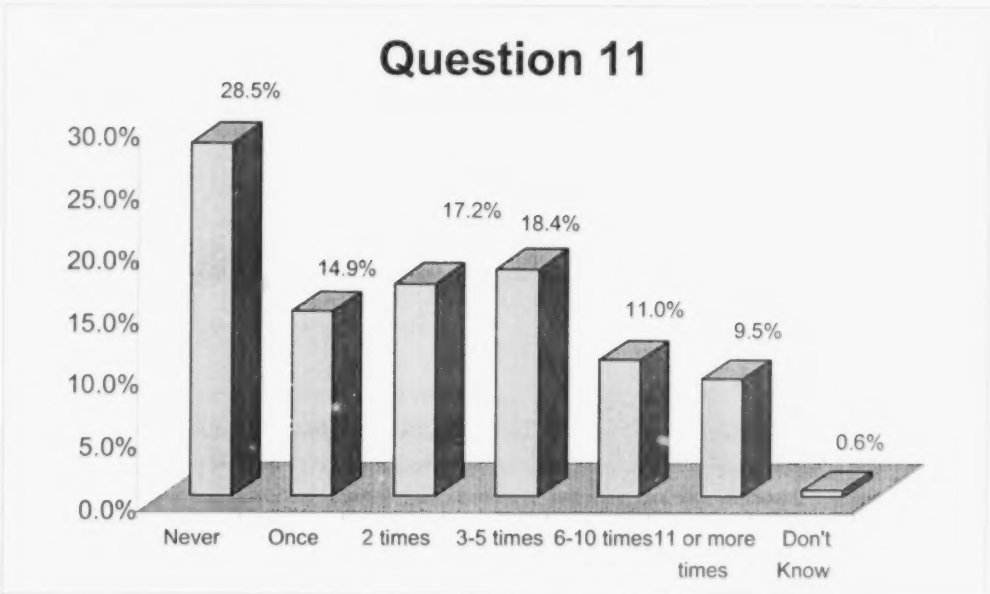
Comparison with Results of 1999 Science World Survey

While Question 10 was asked in the 1999 Science World Survey, the range of functions listed in the question varied significantly between the 1999 and 2003 surveys. Two functions listed comparably on the two surveys: tourist attraction and the Omnimax/IMAX theatre. Familiarity with Science World as a tourist attraction increased from 3.0% in 1999 to 4.3% in 2003. Awareness of the IMAX theatre increased from 7.0% in 1999 to 9.9% in 2003.

Q11. Approximately how many times have you and/or your family attended Science World on your own (i.e. not with a school or other tour group)?

Q11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	133	26.6	28.5	28.5
	Once	69	13.8	14.9	43.4
	2 times	80	16.0	17.2	60.6
	3-5 times	85	17.1	18.4	78.9
	6-10 times	51	10.2	11.0	89.9
	11 or more times	44	8.8	9.5	99.4
	Don't know	3	.6	.6	100.0
	Total	465	93.2	100.0	
Missing	System	34	6.8		
Total		500	100.0		



Of those aware of Science World, 28.5% of respondents had never visited Science World on their own. Another 14.9% had visited Science World once.

Over half (56.1%) of respondents had visited Science World two or more times, indicating a significant level of repeat visitation.

Comparison with Results of 1999 Science World Survey

Question 11 was asked in the 1999 Science World Survey.

Comparative results follow:

"Approximately how many times have you and/or your family attended Science World on your own (i.e. not with a school or other tour group)"?

Number of Visits	Comprehensive Totals %		Lower Mainland		Remainder of BC	
			Area Code 604 %	GVRD %	Area Code 250 %	Outside GVRD %
	2003	1999	2003	1999	2003	1999
	n=465	n=500		n=250		n=250
Never	28.5	27.0	18.1	20.0	50.3	33.0
Once	14.9	28.0	14.0	34.0	17.2	22.0
2 times	17.2		17.1		17.2	
3-5 times	18.4	17.0	22.5	22.0	9.3	12.0
6-10 times	11.0	7.0	15.2	8.0	2.0	6.0
11 or more	9.5	7.0	12.4	10.0	3.3	4.0
Don't Know	0.6	1.0	0.6	1.0	0.7	1.0
Refused	0.0	0.0	0.0	0.0	0.0	0.0
Not aware of Science World	N/A	13.0	N/A	4.0	N/A	22.0

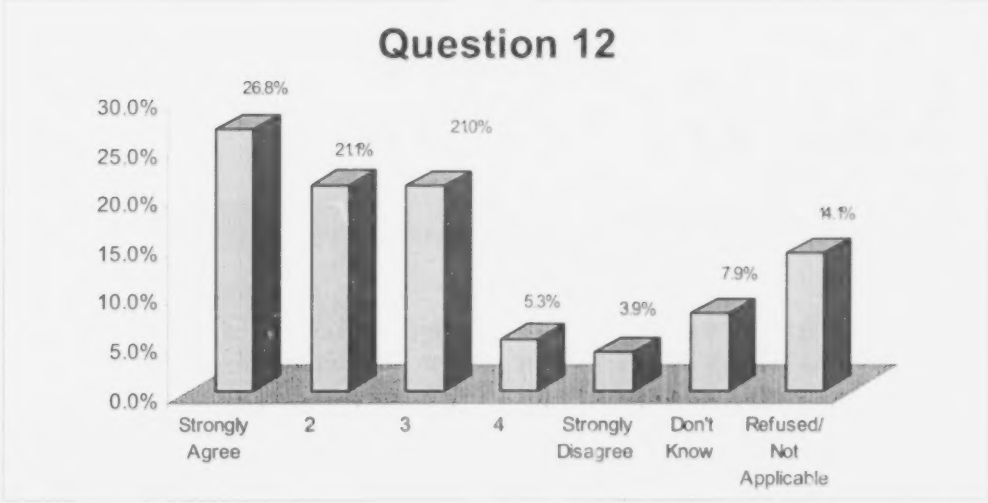
A review of comprehensive totals suggests that the percentage of respondents indicating never having visited Science World or having visited once or twice has not changed significantly between 1999 and 2003. Respondents indicating repeat visitation (3 times or more) have increased from 31% in 1999 to 38.9% in 2003.

Within margins of error, characteristics of visitation of residents from the Lower Mainland (Area Code 604) have not changed significantly since 1999. There is, however, considerable variance from 1999 survey results for residents from elsewhere in British Columbia (Area Code 250). Much of this variation can be attributed to different areas of coverage between 1999 and 2003. The 1999 survey considered residents of the GVRD (Greater Vancouver Regional District), while the 2003 survey considered the Lower Mainland encompassed within Area Code 604 and including the Greater Vancouver, Dewdney-Alouette, Central Fraser Valley and Fraser-Cheam Regional Districts. Analysis does suggest that visitation to Science World falls significantly away from the Lower Mainland.

Q12. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "Science World and its programs have positively influenced my attitudes about science and technology".

Q12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	125	25.0	26.8	26.8
	2	98	19.6	21.1	47.8
	3	98	19.5	21.0	68.8
	4	25	4.9	5.3	74.1
	Strongly Disagree	18	3.6	3.9	77.9
	Don't Know	37	7.4	7.9	85.9
	Refused/NA	66	13.2	14.1	100.0
	Total	465	93.2	100.0	
Missing	System	34	6.8		
Total		500	100.0		



Nearly half (47.9%) of respondents aware of Science World agreed that Science World and its programs had positively influenced attitudes about science and technology. Over one-quarter (26.8%) of respondents indicated strong agreement with the statement.

Approximately one in five (21.0%) of respondents indicated a neutral response to the statement.

Comparison with Results of 1999 Science World Survey

A question similar to Question 12 was asked in the 1999 Science World Survey.

Comparative results follow:

"Science World and its programs have positively influenced my attitudes about science and technology"

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 465	26.8	21.1	21.0	5.3	3.9	7.9	14.1
1999 n = 436	31.0	37.0	0.0	14.0	8.0	11.0	0.0

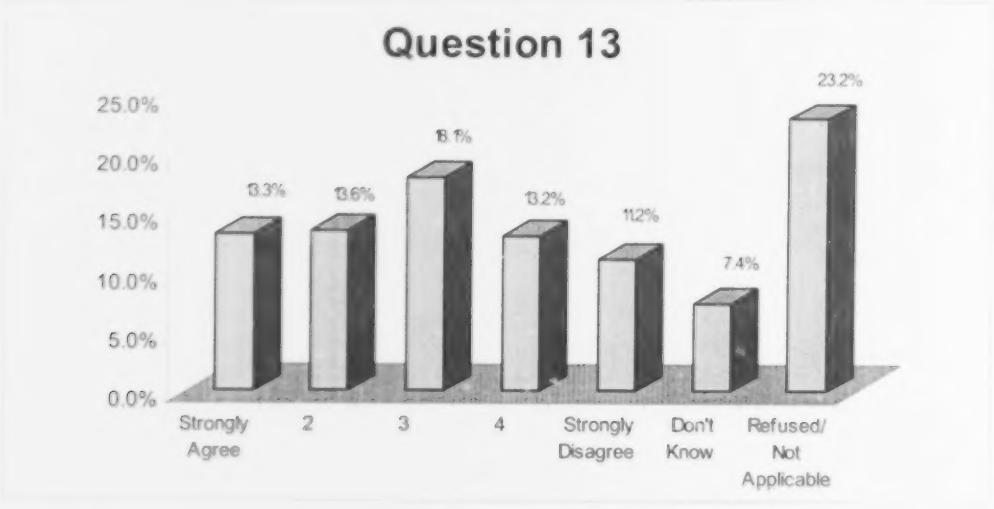
The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Nevertheless, between 1999 and 2003, there has been a significant decline in responses indicating some or strong disagreement with the statement.

The inclusion of a neutral value in 2003 appears to have moderated and nuanced responses indicating strong or some agreement with the statement.

Q13. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "Science World and its programs have increased my interest in science and technology careers".

Q13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	62	12.4	13.3	13.3
	2	63	12.7	13.6	26.9
	3	84	16.9	18.1	45.0
	4	61	12.3	13.2	58.2
	Strongly Disagree	52	10.5	11.2	69.4
	Don't Know	35	6.9	7.4	76.8
	Refused/NA	108	21.6	23.2	100.0
	Total	465	93.2	100.0	
Missing	System	34	6.8		
Total		500	100.0		



Of respondents aware of Science World, 26.9% indicated that Science World and its programs had increased the respondent's interest in science and technology careers. The number of respondents who strongly agreed with the statement was comparable to the number who agreed.

Nearly one in five respondents (18.1%) provided a neutral response to the statement while 24.4% of respondents disagreed or strongly disagreed.

The large percentage (23.2%) of respondents indicating refusal or non-applicability may reflect the age and occupational status of respondents. Inasmuch as most respondents would already have careers, and more than one-third of respondents had no children (see question 14), the statement may have been interpreted more from a perspective of career choice (and hence

inapplicability) rather than from a perspective of curiosity about science and technology careers that might be imparted to children.

Comparison with Results of 1999 Science World Survey

A question similar to Question 13 was asked in the 1999 Science World Survey.

Comparative results follow:

"Science World and its programs have increased my interest in science and technology careers"

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 465	13.3	13.6	18.1	13.2	11.2	7.4	23.2
1999 n = 436	9.0	21.0	0.0	28.0	24.0	18.0	0.0

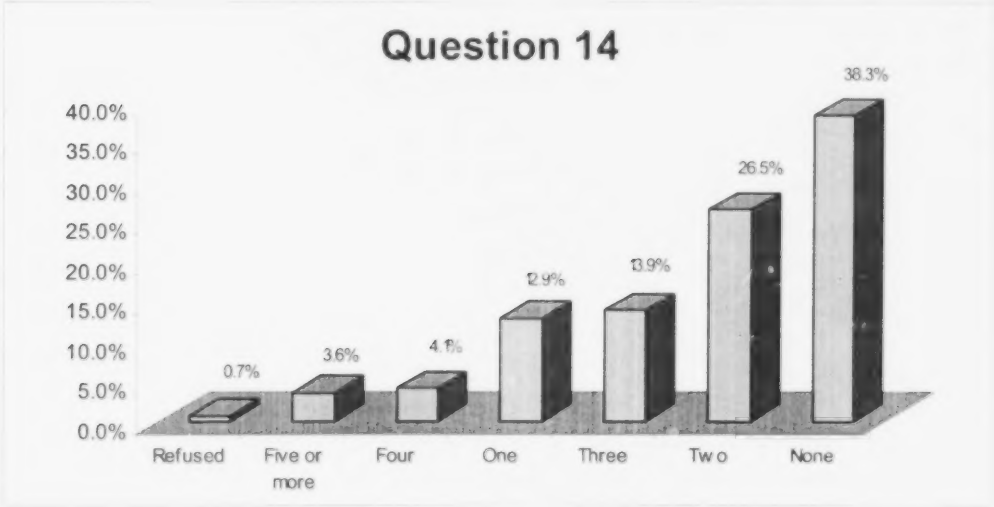
The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Nevertheless, between 1999 and 2003, there has been a significant increase in respondents indicating strong agreement with the statement and a large decline in responses indicating some or strong disagreement with the statement.

The inclusion of a neutral value in 2003 appears to have moderated and nuanced responses indicating some agreement with the statement.

Q14. In order to assist us in classifying the next few questions, could you please tell me how many children you have, if any?

Q14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	178	35.7	38.3	38.3
	One	60	12.0	12.9	51.1
	Two	123	24.7	26.5	77.7
	Three	65	13.0	13.9	91.6
	Four	19	3.8	4.1	95.7
	Five or more	17	3.4	3.6	99.3
	Refused	3	.7	.7	100.0
	Total	465	93.2	100.0	
Missing	System	34	6.8		
Total		500	100.0		

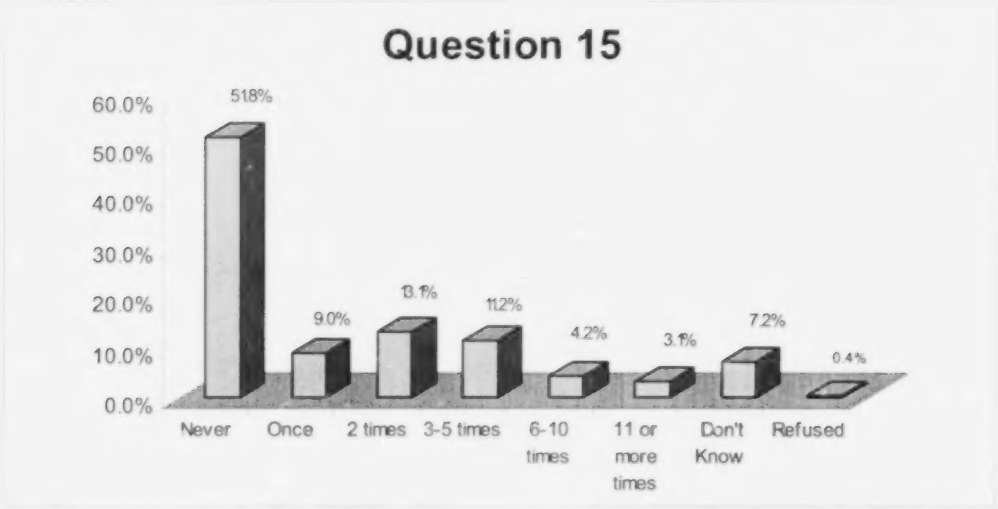


Over one-third (38.3%) of respondents familiar with Science World had no children. Slightly more than one quarter (26.5%) of respondents had two children. Another quarter (26.8%) of respondents had either two or three children.

Q15. Approximately how many times have you, or your children, attended Science World with a school group?

Q15

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	149	29.8	51.8	51.8
	Once	26	5.2	9.0	60.8
	2 times	38	7.5	13.1	73.9
	3-5 times	32	6.4	11.2	85.1
	6-10 times	12	2.4	4.2	89.3
	11 or more times	9	1.8	3.1	92.4
	Don't know	21	4.1	7.2	99.6
	Refused	1	.3	.4	100.0
	Total	287	57.5	100.0	
Missing	System	212	42.5		
Total		500	100.0		



Over half (51.8%) of respondents aware of Science World and having children had never attended Science World with a school group. Nine (9.0%) of respondents had visited Science World once with a school group. Nearly one third (31.6%) of respondents with children had visited Science World twice or more.

Comparison with Results of 1999 Science World Survey

Question 15 was asked in the 1999 Science World Survey.

Comparative results follow:

"Approximately how many times have you, or your children, attended Science World with a school group"?

Number of Visits	Comprehensive Totals %		Lower Mainland		Remainder of BC	
			Area Code 604 %	GVRD %	Area Code 250 %	Outside GVRD %
	2003	1999	2003	1999	2003	1999
	n=287	n=500		n=250		n=250
Never	51.8	53.0	42.5	55.0	71.3	50.0
Once	9.0	19.0	8.8	22.0	9.6	15.0
2 times	13.1		16.1		6.4	
3-5 times	11.2	8.0	15.0	10.0	11.1	6.0
6-10 times	4.2	2.0	5.2	3.0	2.1	2.0
11 or more	3.1	1.0	3.1	2.0	3.2	1.0
Don't Know	7.2	3.0	9.3	4.0	3.2	3.0
Refused	0.4	0.0	0.0	0.0	1.1	0.0
Not aware of Science World		13.0		4.0		22.0

Consistent with 1999 survey results, over half of all respondents had not visited Science World with a school group. A small increase between 1999 and 2003 in the number of respondents who had visited once or twice is within an acceptable margin of error. Between 1999 and 2003, approximately 20% of respondents had visited Science World once or twice.

When responses are disaggregated between Area Codes, visitation to Science World with a school group has increased since 1999. In 2003 a significantly lower number of Lower Mainland respondents indicated never having visited Science World with a school group than in 1999, and larger percentages of respondents indicated visiting Science World three or more times.

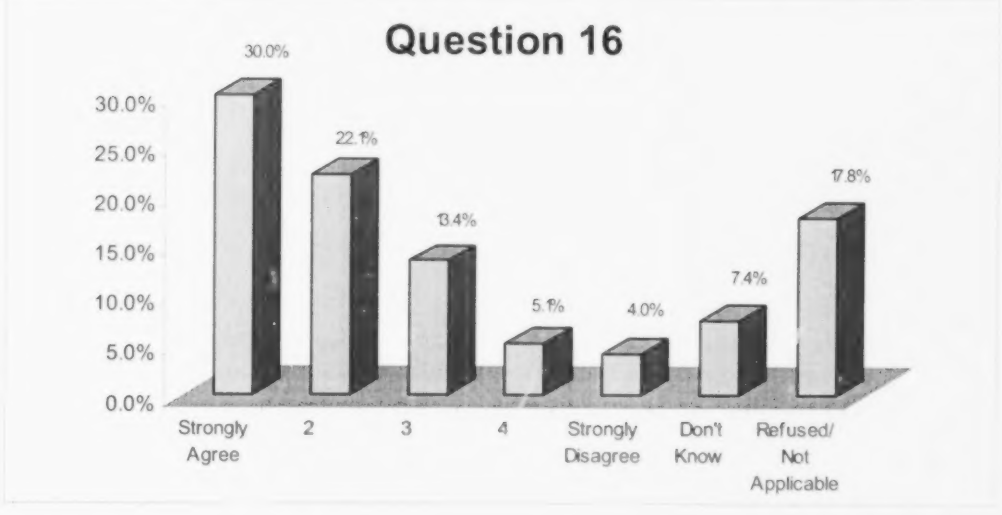
Variances arise between the 1999 and 2003 survey results for residents from elsewhere in British Columbia (Area Code 250). Much of this variation can be attributed to different areas of coverage between 1999 and 2003. The 1999 survey considered residents of the GVRD (Greater Vancouver Regional District), while the 2003 survey considered the Lower Mainland encompassed within Area Code 604 and including the Greater Vancouver, Dewdney-Alouette, Central Fraser Valley and Fraser-Cheam Regional Districts. Analysis does suggest that visitation to Science World falls significantly away from the Lower Mainland. This is illustrated

by the large percentage of respondents who indicated that they had never visited Science World with a school group.

Q16. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "Science World and its programs have positively influenced your children's attitudes about science and technology".

Q16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	86	17.3	30.0	30.0
	2	64	12.7	22.1	52.2
	3	39	7.7	13.4	65.6
	4	15	2.9	5.1	70.7
	Strongly Disagree	12	2.3	4.0	74.7
	Don't Know	21	4.3	7.4	82.2
	Refused/NA	51	10.2	17.8	100.0
	Total	287	57.5	100.0	
Missing	System	212	42.5		
Total		500	100.0		



Nearly one third (30.0%) of respondents aware of the Science Council and having children strongly agreed with the statement that Science World and its programs have positively influenced their children's attitudes about science and technology. A further 22.1% of respondents indicated agreement with the statement. Nearly one in ten (9.1%) respondents indicated disagreement with the statement.

The 17.8% of respondents who responded as "refused/not applicable." It is not clear why so many respondent answers were refusals or not applicable. It is possible that some of these responses may be more accurately described as "don't know."

Comparison with Results of 1999 Science World Survey

A question similar to Question 16 was asked in the 1999 Science World Survey.

Comparative results follow:

"Science World and its programs have positively influenced your children's attitudes about science and technology"

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 287	30.0	22.1	13.4	5.1	4.0	7.4	17.8
1999 n = 278	32.0	33.0	0.0	12.0	7.0	15.0	0.0

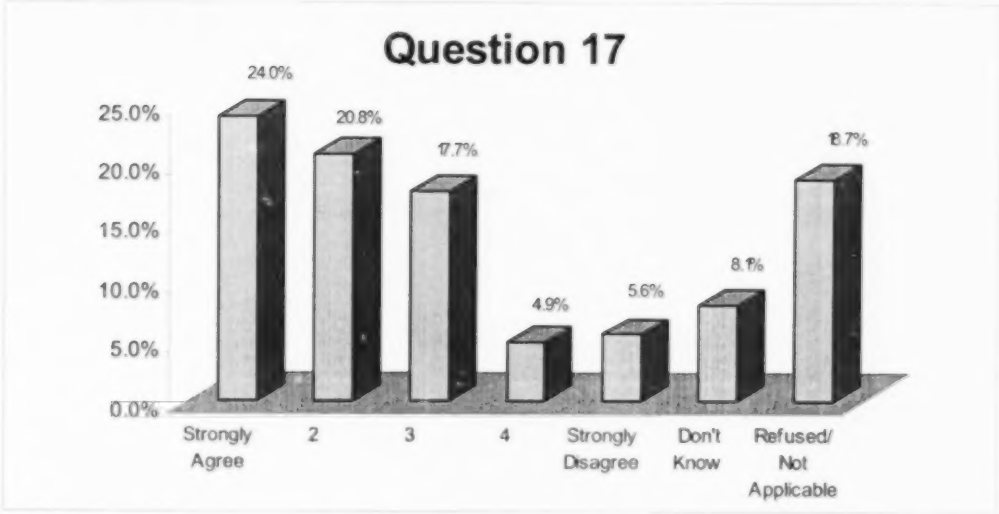
The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Nevertheless, between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement.

The inclusion of a neutral value in 2003 appears to have moderated and nuanced responses indicating some or strong agreement with the statement.

Q17. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "Science World and its programs have increased my children's interest in science or technology education."

Q17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	69	13.8	24.0	24.0
	2	60	12.0	20.8	44.9
	3	51	10.2	17.7	62.6
	4	14	2.8	4.9	67.5
	Strongly Disagree	16	3.2	5.6	73.2
	Don't Know	23	4.7	8.1	81.3
	Refused/NA	54	10.7	18.7	100.0
	Total	287	57.5	100.0	
Missing	System	212	42.5		
Total		500	100.0		



Respondents aware of Science World and having children agreed (44.8%) with the statement that "Science World and its programs have increased my children's interest in science or technology education." Nearly one-quarter (24.0%) strongly agreed with the statement.

Neutral responses were provided by 17.7% of respondents. Disagreement with the statement was registered by 10.5% of respondents.

It is not clear why 18.7% of respondents indicated refusal or non-applicability.

Comparison with Results of 1999 Science World Survey

A question similar to Question 17 was asked in the 1999 Science World Survey.

Comparative results follow:

"Science World and its programs have increased my children's interest in science or technology education"

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 287	24.0	20.8	17.7	4.9	5.6	8.1	18.7
1999 n = 278	17.0	31.0	0.0	19.0	15.0	18.0	0.0

The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Nevertheless, between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement.

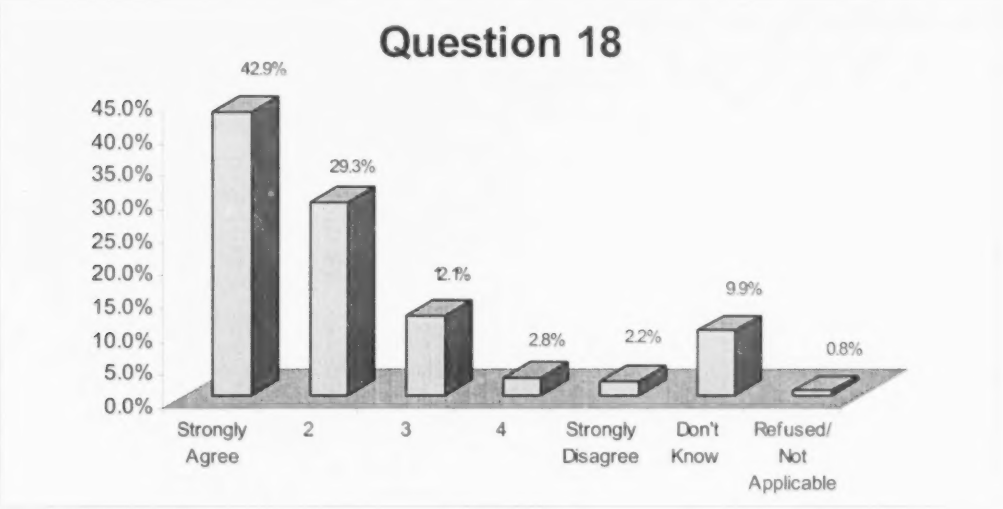
Strong agreement with the statement increased form 17% in 1999 to 24.0% in 2003.

The inclusion of a neutral value in 2003 appears to have moderated and nuanced responses indicating some agreement with the statement.

Q18. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "Science World has made an important contribution to science and technology education".

Q18

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	200	40.0	42.9	42.9
	2	136	27.3	29.3	72.2
	3	56	11.3	12.1	84.3
	4	13	2.6	2.8	87.1
	Strongly Disagree	10	2.0	2.2	89.3
	Don't Know	46	9.2	9.9	99.2
	Refused/NA	4	.8	.8	100.0
	Total	465	93.2	100.0	
Missing	System	34	6.8		
Total		500	100.0		



Nearly half (42.9%) of respondents aware of Science World and having children strongly agreed with the statement that "Science World has made an important contribution to science and technology education". A further 29.3% indicated agreement. Combined, 72.2% or respondents registered agreement with the statement.

Comparison with Results of 1999 Science World Survey

A question similar to Question 18 was asked in the 1999 Science World Survey.

Comparative results follow:

"Science World has made an important contribution to science and technology education".

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 500	42.9	29.3	12.1	2.8	2.2	9.9	0.8
1999 n = 500	40.0	35.0	0.0	2.0	2.0	21.0	0.0

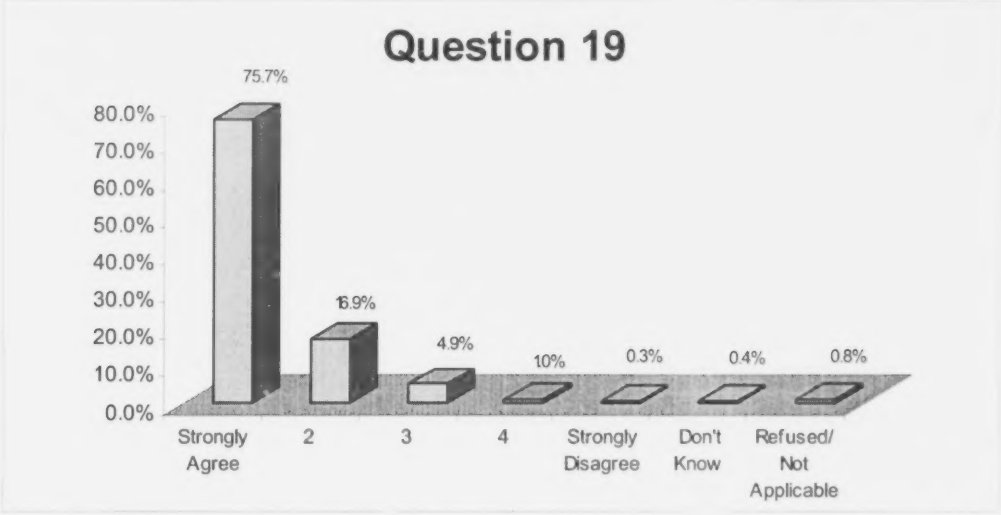
The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Disagreement with the statement may have increased slightly between 1999 and 2003, but the differences may be accommodated within an acceptable margin of error. It does appear, however, that between 1999 and 2003, there has been a major decline in the number of respondents indicating "don't know".

The inclusion of a neutral value in 2003 appears to have moderated and nuanced responses indicating some agreement with the statement.

Q19. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "It is very important that an institution like Science World is available to BC's youth to learn about science and technology".

Q19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	352	70.5	75.7	75.7
	2	79	15.8	16.9	92.6
	3	23	4.6	4.9	97.6
	4	5	.9	1.0	98.6
	Strongly Disagree	1	.3	.3	98.8
	Don't Know	2	.3	.4	99.2
	Refused/NA	4	.8	.8	100.0
	Total	465	93.2	100.0	
Missing	System	34	6.8		
Total		500	100.0		



Respondents aware of Science World and having children expressed agreement with the statement that "It is very important that an institution like Science World is available to BC's youth to learn about science and technology." Respondents indicating strong agreement constituted 75.7 % of responses.

Comparison with Results of 1999 Science World Survey

A question similar to Question 19 was asked in the 1999 Science World Survey.

Comparative results follow:

"It is very important that an institution like Science World is available to BC's youth to learn about science and technology".

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 500	75.7	16.9	4.9	1.0	0.3	0.4	0.8
1999 n = 500	72.0	18.0	0.0	2.0	1.0	7.0	0.0

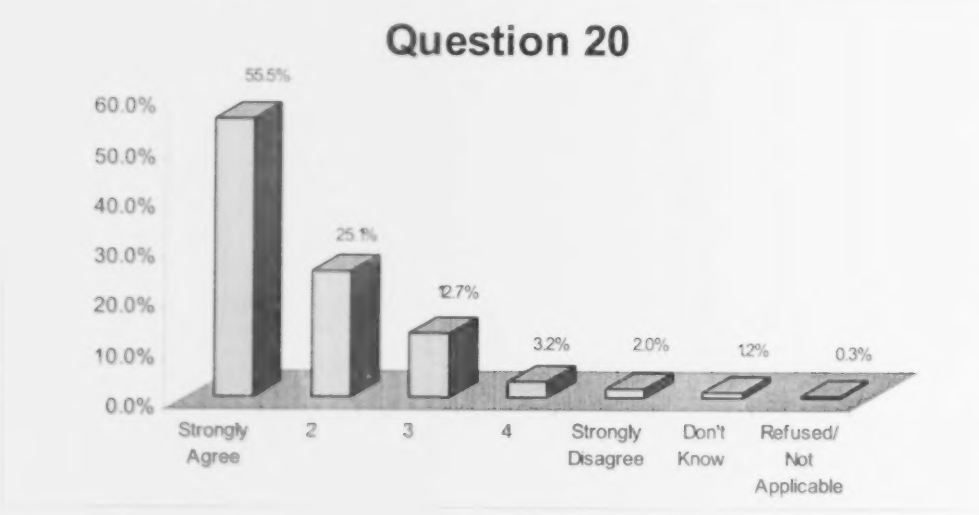
The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Nevertheless, with this statement, there appears to have been little change in public attitude between 1999 and 2003.

It does appear, however, that between 1999 and 2003, there has been a major decline in the number of respondents indicating "don't know".

Q20. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "Public funds should be provided to encourage the development of science, technology, and innovation".

Q20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	277	55.5	55.5	55.5
	2	126	25.1	25.1	80.6
	3	63	12.7	12.7	93.3
	4	16	3.2	3.2	96.5
	Strongly Disagree	10	2.0	2.0	98.5
	Don't Know	6	1.2	1.2	99.7
	Refused/NA	2	.3	.3	100.0
	Total	500	100.0	100.0	



Over half (55.5%) of all respondents indicated strong agreement that "Public funds should be provided to encourage the development of science, technology, and innovation." A further 25.1% registered some agreement with the statement.

Disagreement with the statement was indicated by 5.2% of all respondents.

Comparison with Results of 1999 Science World Survey

A question similar to Question 20 was asked in the 1999 Science World Survey.

Comparative results follow:

"Public funds should be provided to encourage the development of science, technology, and innovation".

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 500	55.5	25.1	12.7	3.2	2.0	1.2	0.3
1999 n = 500	47.0	34.0	0.0	8.0	7.0	4.0	0.0

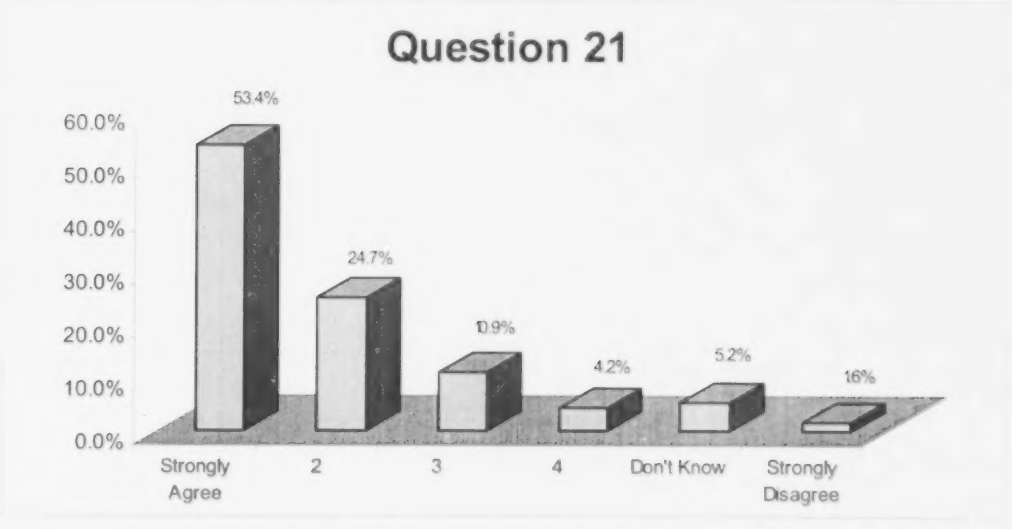
The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Nevertheless, between 1999 and 2003, there has been a large decline in responses indicating some or strong disagreement with the statement and there has been a notable increase in responses indicating strong agreement with the statement.

The inclusion of a neutral value in 2003 appears to have moderated and nuanced responses indicating some agreement with the statement.

Q21. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "BC needs a more technologically skilled workforce in order to compete".

Q21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	267	53.4	53.4	53.4
	2	123	24.7	24.7	78.1
	3	54	10.9	10.9	89.0
	4	21	4.2	4.2	93.2
	Strongly Disagree	8	1.6	1.6	94.8
	Don't Know	26	5.2	5.2	100.0
	Total	500	100.0	100.0	



Slightly more than half (53.4%) of all respondents strongly agreed that BC needs a more technologically skilled workforce. A further 24.7% indicated some agreement with the statement.

One in ten respondents (10.9%) indicated neutrality on the statement while 5.8% of all respondents indicated some level of disagreement with the statement.

Differences in responses of residents in Area Codes 604 and 250 were minor and within margins of error. Nevertheless, residents in Area Code 250 appear to have been more likely to "strongly agree" with the statement (56.4%) than were residents of the Lower Mainland in Area Code 604 (51.8%)

Crosstab

			Q21						
			Strongly Agree	2	3	4	Strongly Disagree	Don't Know	Total
RECOD	604 Lower mainl	Count	169	88	35	11	6	17	326
		% within RECO	51.8%	27.0%	10.7%	3.4%	1.8%	5.2%	100.0%
		% within Q21	63.5%	71.5%	64.8%	52.4%	75.0%	65.4%	65.5%
	250 Rest of BC	Count	97	35	19	10	2	9	172
		% within RECO	56.4%	20.3%	11.0%	5.8%	1.2%	5.2%	100.0%
		% within Q21	36.5%	28.5%	35.2%	47.6%	25.0%	34.6%	34.5%
Total		Count	266	123	54	21	8	26	498
		% within RECO	53.4%	24.7%	10.8%	4.2%	1.6%	5.2%	100.0%
		% within Q21	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Comparison with Results of 1999 Science World Survey

Question 21 was asked in the 1999 Science World Survey.

Comparative results follow:

"BC needs a more technologically skilled workforce in order to compete".

	Agree Strongly %	Agree Somewhat %	Neutral %	Disagree Somewhat %	Strongly Disagree %	Don't Know %	Refused, Non-Applicable %
2003 n = 500	53.4	24.7	10.9	4.2	1.6	5.2	0.0
1999 n = 500	68.0	22.0	0.0	4.0	1.0	1.0	0.0

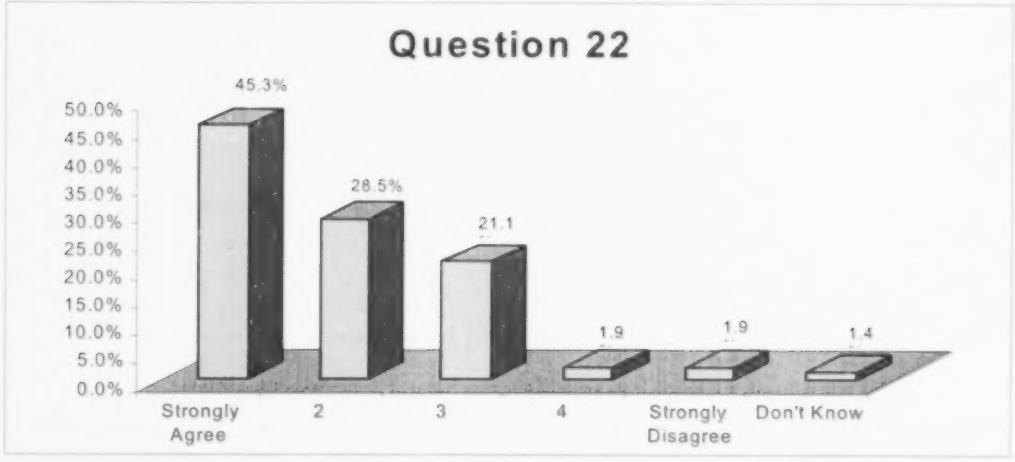
The adoption of a 5-point scale in 2003 and the inclusion of a neutral value (3) limits comparability between 1999 and 2003 survey responses. Nevertheless, between 1999 and 2003, there has been a decline in responses indicating strong agreement with the statement.

There has also been a notable increase in "don't know" responses between 1999 and 2003.

Q22. On a scale of one to five, please tell me whether you agree or disagree with the following statement: "Science and technology is making life easier and better."

Q22

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	226	45.3	45.3	45.3
	2	142	28.5	28.5	73.8
	3	105	21.1	21.1	94.9
	4	9	1.9	1.9	96.7
	Strongly Disagree	9	1.9	1.9	98.6
	Don't Know	7	1.4	1.4	100.0
	Total	500	100.0	100.0	



Nearly three-quarters (73.8%) of all respondents indicated some level of agreement with the statement that science and technology is making life easier and better. Respondents strongly agreeing with the statement accounted for 45.3% of all responses.

Approximately one respondent in five (21.1%) indicated a neutral response, but only 3.8% indicated some level of disagreement with the statement.

Disaggregation of responses between Area Codes 604 and 250 reveal that residents of the Lower Mainland are much more likely to agree (48.2%) with the statement than are residents elsewhere in BC (39.9%). Similarly, many fewer residents (0.9%) in Area Code 604 are likely to "strongly disagree" with the statement than are residents outside the Lower Mainland (3.5%).

Crosstab

		Q22						
		Strongly Agree	2	3	4	Strongly Disagree	Don't Know	Total
RECOD 604 Lower mair	Count	157	93	64	5	3	4	326
	% within REC	48.2%	28.5%	19.6%	1.5%	.9%	1.2%	100.0%
	% within Q22	69.5%	65.0%	61.0%	55.6%	33.3%	57.1%	65.3%
250 Rest of BC	Count	69	50	41	4	6	3	173
	% within REC	39.9%	28.9%	23.7%	2.3%	3.5%	1.7%	100.0%
	% within Q22	30.5%	35.0%	39.0%	44.4%	66.7%	42.9%	34.7%
Total	Count	226	143	105	9	9	7	499
	% within REC	45.3%	28.7%	21.0%	1.8%	1.8%	1.4%	100.0%
	% within Q22	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

APPENDIX ONE

DISTRIBUTION OF RESPONSES

Distribution of Responses

- 100 Mile House (2)
- 150 Mile House (2)
- Abbotsford (17)
- Agassiz
- Aldergrove (2)
- Anmore
- Armstrong
- Barriere
- Boston Bar
- Bowen Island
- Burnaby (23)
- Burns Lake
- Campbell River (3)
- Castlegar (3)
- Chase
- Chetwynd
- Chilliwack (11)
- Cloverdale (2)
- Cobble Hill
- Coldstream
- Comox (3)
- Coquitlam (17)
- Cranberry - Powell River
- Cranbook (6)
- Dawson Creek (5)
- Delta (9)
- Downtown Vancouver
- Duncan (3)
- East Vancouver (3)
- Esquimalt
- Fleetwood
- Sorrento
- Fort St. John (2)
- Gabriola Island (2)
- Ganges
- Gibsons (3)
- Greater Vancouver
- Gulf Island
- Harrison Hot Springs
- Highlands
- Horsefly
- Houston
- Indo Canadian
- Kamloops (8)

- Kaslo
- Kelowna (7)
- Kimberley (2)
- Kitimat
- Kitsilano (2)
- Ladner
- Lake Cowichan
- Langley (11)
- Likely
- Lillooet
- Logan Lake
- Lund
- Maple Ridge (14)
- McBride
- Merritt (2)
- Merritt
- Mission (4)
- Nakusp.
- Nanaimo (6)
- Nanoose Bay
- Naramata
- Nelson
- New Westminster (8)
- North Delta
- North Vancouver (18)
- Okanagan Falls
- Okanagan Region
- Oliver
- Osoyoos
- Parksville (4)
- Peachland
- Penticton
- Pitt Meadows (2)
- Point Grey (2)
- Port Alberni, B.C.
- Port Clements
- Port Coquitlam (9)
- Port Hardy
- Port McNeill
- Port Moody (4)
- Powell River (6)
- Prince George (5)
- Prince Rupert (2)
- Quadra Island (2)
- Qualicum Beach (2)
- Quesnel (2)

- Richmond (13)
- Rossland (2)
- Saanichton
- Salmon Arm (4)

APPENDIX TWO

OPEN-ENDED AND OTHER COMMENTS

Science and Technology Survey 2003

Open-Ended and Other Comments

Q3 Other

- 4N Tech.
- Accenture.
- Airline industries and educational institutes.
- Aquariums and universities.
- ASTT and BCIT.
- Avionics.
- BC Cancer Agency.
- BC Cancer Research Centre and all Universities.
- BC Cancer Research Centre and environmental research.
- BC Cancer Society.
- BC Fisheries and BC Forestry.
- BC Hydro and BC Gas.
- BC Hydro and BC Telephones.
- BC Hydro and Bolt Energy.
- BC Hydro, oil and gas, and forestry industry.
- BC Hydro. (3)
- BC Institute and Science World.
- BC Institute of Technology and Science World.
- BC Institute of Technology and Simon Fraser University.
- BC Institute of Technology and the universities.
- BC Institute of Technology and UBC.
- BC Institute of Technology, UBC, and game studios such as EA Sports and Relic.
- BC Institute of Technology, UBC, and SFI.
- BC Institute of Technology. (14)
- BC Research, Science World, BC Biotech, Twinstrand, Kinexus, UBC, and SFI.
- BC Universities and the environmental sector of the government.
- Biomed Response and Zylon Technologies.
- Businesses.
- Canadian Cancer Clinic, Science World, and the universities.
- Canadian Cancer Society.
- Canadian forest products.
- Cancer Agency and Telus.
- Cancer Research Agency and University of BC.
- Cancer research and University of BC.
- Cancer Research Centre.
- Canfor and Electronics Art.
- CAST.
- CDC.
- Colleges and universities.
- Colleges, universities, and companies that let you order your food through the computer.
- Computer companies.
- Computer industry, medical research, and aerospace industry.

- David Suzuki Foundation. (4)
- Deep sea diving.
- Discovery Park and University of BC.
- EA Sports and PMC Sierra.
- Electronic Arts and MacDonald Detwiller.
- Electronic Arts and Norsat.
- Electronic Arts, BCIT, and PNC Sierra.
- Electronic Arts.
- Fishing and forestry.
- Forestry and medical institutions.
- Fuel replacements and fish farms.
- Harmac Pulp Mill.
- Health and forestry.
- Hospitals. (2)
- Industrial.
- Inex and Electronic Arts.
- Institute of Fisheries, mines, and resources.
- Kinexus.
- Life Cycles, Pacific Forestry Centre, and BC Horticultural Society.
- Logging, fishing, and tourism.
- Lumber Industries and air.
- Marine and forestry.
- Marine Science.
- Marine World and universities.
- McMillan Bloedel.
- MDD.
- Medical institutions. (2)
- Medical research and universities.
- Medical research at universities, marine biology, and telecommunications.
- Medical research.
- Medicine.
- Microbiology lab, British Columbia Cancer Control, and University of British Columbia.
- Molecular Biology Laboratory, cancer research, and Triumf.
- NASA.
- National Geographic.
- NRC.
- Ocean sciences.
- Ocean, fisheries, and wildlife.
- Oceanographics.
- Planetarium, Science World, zoo in Abbotsford, and aquarium.
- PMC Sierra, Simon Fraser University, and UBC.
- Professional engineers and geoscientists.
- Quadralogic.
- Research institutes.
- Researching diseases and forest industries.
- Saanich Mountain.

- Sawmills.
- Schools. (3)
- Science Centre of BC and University of BC.
- Science Centre. (4)
- Science World and BCIT.
- Science World and medical labs.
- Science World and Simon Fraser University.
- Science World and Telus.
- Science World and UBC Museum.
- Science World and UBC.
- Science World, Simon Fraser University, and University of BC.
- Science World, BC Institute of Technology, and universities.
- Science World, University of British Columbia Hospital, and cancer research.
- Science World. (21)
- Secondary colleges and transportation.
- Sierra Systems.
- Sierra Wireless and MDI.
- Sierra Wireless and QLC.
- Simon Fraser University and University of BC. (4)
- Simon Fraser University.
- Spinal cord research.
- St Paul's hospital and UBC.
- Telephones, power, and transportation.
- Telus and Electronic Arts.
- Telus and Nortel.
- Telus and Shaw Cable.
- The forest and marine industry.
- The hospitals.
- The lumber industry.
- The medical system.
- The Rick Hansen Institute and BC Cancer Agency.
- The Science Museum and UBC.
- The universities and Simon Fraser University.
- Triumf and nuclear research.
- Triumf and Science World.
- Triumf and Smith.
- Triumf and Westport.
- UBC and BCIT. (3)
- UBC and hospitals. (2)
- UBC and private pharmaceutical companies.
- UBC and Science World.
- UBC and Simon Fraser University. (3)
- UBC and St. Paul's Hospital.
- UBC and University of Victoria.
- UBC research.
- UBC, BCIT, and Science World.

- UBC, BCIT, and Simon Fraser University. (2)
- UBC, BCIT, Science World, and Simon Fraser University.
- UBC, forestry industry, and manufacturing.
- UBC, National Research Council, and Simon Fraser University.
- UBC, Science World, and SFI.
- UBC, SFI, and BCIT.
- UBC, SFI, and University of Victoria.
- UBC, SFI, BCIT, and biomedical institutes.
- UBC, Simon Fraser University, and BC Technology.
- UBC, Simon Fraser University, and BCIT. (2)
- UBC, Simon Fraser University, and Victoria Museum.
- UBC, University of Victoria, and Simon Fraser University.
- UBC. (23)
- Universities and high schools.
- Universities and private corporations.
- Universities and schools.
- Universities, medical research, and forestry.
- Universities. (16)
- University College of Caribou.
- University of BC and Simon Fraser University. (11)
- University of British Columbia, Simon Fraser University, University of Victoria, logging industry, mining industry, and Fisheries Institute.
- University of Northern BC.
- University of Victoria, University of BC, and Camosun College.

Q5 Other

- All of the above. (4)
- None of them.
- Mental health and prevention of drug addictions.

Q6 Other

- Too much Federal and Provincial government involvement telling people what to do.
- They spend too much energy on natural resources.
- The States rob our scientists.
- The premier of the province is shutting down a lot of programs.
- The government that is in power now.
- Specialists in the field.
- Political support.
- Political agendas.
- Our location in Western Canada versus Ontario or Quebec.
- None of the above, the government.
- Lack of wages.
- Lack of research dollars.
- Lack of political will.

- Lack of government incentives for research in general.
- Lack of federal government commitment to programs.
- Lack of corporate taxes.
- Have the government open to private investments.
- Government is to blame for everything.
- Funding doesn't see enough value in science, even after they open the facilities.
- Education does not instill proper motivation. Education is mechanical and 9am-5pm. Incentive and inspiration would be beneficial and essential.
- Current economy; political front in the USA; and bureaucracy in all levels of government that could interfere with future development.
- Corporate Interference.
- Continued funding for research.
- Christy Clark, Minister of Education.
- All of the (2)

Q7 Other

- BC Research Inc. at UBC.
- BCIT and University of BC.
- Books, brochures, library.
- Both Universities.
- College of the Rockies.
- Colleges and Universities. (2)
- Computer. University of B.C.
- Conversations (word of mouth).
- CREO.
- I would ask my son because he is in that field of work.
- Internet. (3)
- It does not concern my life. I would just let it go the way it is going. Those responsible have to conduct it efficiently and I have no influence.
- Look in the phone book under Science.
- My son is a scientist so I'd ask him.
- National Geographic Magazine.
- Ocean Sciences.
- One of the universities, Environment Canada.
- Our Local College.
- Pacific Forestry Centre.
- Personal experience.
- Schools, Universities.
- Science World, High schools.
- Science World.
- Telephone book. (6)
- Universities and Colleges. (2)
- Universities. (17)
- The University of British Columbia. (8)
- The Yellow pages. (6)

- U of BC, Simon Fraser University.
- U of BC, telephone book.
- U S Fraser.
- UBC Alumni Journal.
- UBC and BCIT. (2)
- UBC, or other universities.
- UBC, UBC Hospital.

Q8 Other

- Anthropology Department at University of BC.
- B.C. Place.
- Ballard Fuel Systems.
- Bamfield Research Centre.
- BC Hydro.
- BC Institute of Technology. (9)
- BC Museum of Science and Technology.
- BC Technical Institute.
- BCIT and The Universities.
- BCIT and UBC.
- BCIT and University of BC.
- BCIT, UBC, SFU.
- Biomedical research.
- Both Universities, Free Enterprise.
- Both Universities. (2)
- Butchart Gardens, Horticultural Society Gardens.
- Canadian Cancer Research.
- Cancer Clinic.
- Cancer clinics, UBC hospital facilities, Burnaby - Ballard Fuel Cell.
- Cancer Research and Mental Health Research.
- CDC.
- Department of Anthropology.
- Dominion Space Observatory.
- Educational facilities.
- Electronic Arts. BCIT.
- Experimental Station in Summerland, BC, and research facilities at UBC.
- Fast ferries.
- Fisheries. Lumber industry.
- Forestech.
- Forestry.
- Helix Bio-Tech. UBC.
- Hell Gate Airdram.
- Hospital Laboratories.
- Hospitals.
- Hydro Dam.
- Hydro Dams.

- Imax Theatre. (2)
- Industrial Parks and BCIT.
- ITT Tech.
- Large dams in B.C. The underwater cameras for taking pictures (marine biology).
- Library. (2)
- MacMillan Space Centre. (2)
- Museums and science fairs.
- Museum of Anthropology, Vancouver Library.
- Museum of Man, all the universities, and the Marine Institute.
- Museum.
- Nature Parks.
- Oil fields.
- One of the Universities.
- Orca study - marine biology lab on northern Vancouver Island.
- Pacific National Exhibition.
- Planetarium.
- Planetarium. Schools. Computers. Free thinking outside of schools such as independent home-based business.
- Prince George Regional Museum.
- Research Center at SSU.
- Rick Hanson Charity.
- Science and Nature Club. Health Unit. Energy Mines.
- Science Center in Burnaby.
- Science centres.
- Science Expositions.
- SFU - Discovery Centre, UBC, University of Victoria.
- Sidney Deep Dive Research. Marine Central or CanDive Services.
- Simon Fraser University and University of BC.
- Sky train.
- Sooke Area, Okanagan, Queen Charlotte Islands, and North Shore.
- St. Paul's and Vancouver General Hospital.
- Stanley Park Marine with whales and aquatic. Duncan Eco Centre.
- Techcominco Ltd.
- The Cancer Clinic and University of BC.
- The Colleges and Universities.
- The mining and forestry industries.
- The New Cancer Research Facility.
- The Pacific Ocean.
- The Sewage Plant.
- The universities and colleges that are here.
- The Universities. (3)
- Triumf; Neurological Disorder Centre at UBC; BCIT.
- Triumf Centre, MacMillan Space Centre.
- Triumf Centre. (3)
- Triumf, UBC and BCIT.
- UBC and Brittania Mines.

- UBC and Simon Fraser University. (4)
- UBC, BCIT. (2)
- UBC, The Science Museum.
- UBC, The Triumf Unit and BCIT.
- UBC, Triumf, VGH. St. Paul's Hospital.
- UBC, UBCGH, Cancer research, Electronic Arts in Burnaby, VIA Tech.
- UBC. Triumf. (3)
- UBC; Cancer Centre in Vancouver.
- Uniglobe.
- University of Victoria and BCIT.
- Universities, The west coast has tours of hydro facilities, BCIT, Observatory.
- Universities. (9)
- Universities: UBC and Simon Fraser.
- University of BC and BCIT.
- University of BC and Simon Fraser University. (2)
- University of BC and The Health Science Centre.
- University of BC. (37)
- University.
- Vancouver Game Farm.
- WAC Bennett Dam.
- WBC Bennett Dam, Alcan Smelter, and whale watching.

Q10 Other

- Animal shows on television.
- Applications of science.
- Education. (3)
- Guest speakers and demonstrations.
- Guided tours.
- Hands-on exhibits.
- Hands-on of basic sciences.
- Have exhibitions for school kids.
- Information.
- Information, always different when you go there.
- Inspiration for minds that need to be inspired.
- Interactive displays.
- Interactive programs for families.
- Interactive, stimulating information that is supposed to jog particularly children's interest in physical sciences.
- It encourages children to consider a science career.
- It's a source of employment for students in science-related fields.
- It's a super place for kids.
- Knowledge of the topics, they give you basic information.
- Movies.
- Museum. (2)
- New information. (2)

- On-going hands-on displays.
- Opportunity for students to see first hand and maybe enter those fields later for school.
- Outreach to schools.
- Puzzles and games at desks.
- Restaurants.
- Satisfies a thirst for science, to encourage them or a least teach them how things work.
- School children go there a lot for field trips.
- Seminars.
- Technical information.
- Videos on how to save the whales.
- You can buy educational products at their gift shop.

APPENDIX THREE

QUESTIONNAIRE

Science and Technology Survey
Science World and Science Council of BC
April 2003

Hello. This is ___(name)_____ with Pulse Research Limited. I am calling on behalf of the Science Council of BC and Science World who are jointly conducting a survey to gauge public opinion and attitudes of BC residents toward general science and technology issues. Similar surveys were conducted in 1994 and 1999. Your answers will help the Science Council and Science World develop programs, services and other information for the public.

This survey will take approximately 5-7 minutes to complete. Your answers will be strictly confidential, and your participation is voluntary. Would you be willing to take a few minutes with me now to complete the survey? (If yes, PROCEED TO QUESTION 1)

Would you rather that I call back later? What time would be convenient? _____

A. Before we begin, can you tell me if anyone in your household works for an advertising agency or a market research company?

1. NO - Press any key to continue
2. YES - Thank and terminate

1. On a scale of one to five, with one being not at all important and five being very important, how important are science and technology to the PRESENT growth and development of B.C.'s people, industries, and economy?

1 _____Not at all important
2 _____
3_____
4_____
5_____Very important
6_____Don't Know
7_____Refused

2. Using the same scale one to five, with one being not at all important and five being very important, how important will science and technology be to the FUTURE growth and development of B.C.'s people, industries, and economy?

1 _____Not at all important
2 _____
3_____
4_____
5_____Very important
6_____ Don't Know
7 _____Refused

3. Which **BC-based** organizations and companies come to mind when you think of science and technology? (DON'T READ)

1. ____ Science Council of British Columbia (GO TO Question 5)
2. ____ BC Technology Industries Association
3. ____ Pivotal
4. ____ Ballard Power
5. ____ BC Biotech
6. ____ Creo
7. ____ BC Advanced Systems Institute
8. ____ MacDonald Detwiller
9. ____QLT
10. ____360 Networks
11. ____ Others (Please Specify…)_____
12. ____ Don't Know
13. ____ Refused

4. Are you familiar with the Science Council of British Columbia?

1. ____ Yes
2. ____ No
3. ____ Don't Know
4. ____ Refused

5. Which **three** of the following Science & Technology-based Industries do you think BC should focus it research and development efforts to obtain the greatest benefits for the province.

1. ____ Life Sciences & Biotechnology
2. ____Information and Communication Technologies (computers/software/semiconductors)
3. ____ Energy & Alternative Fuels
4. ____ Advanced Materials & Chemical Engineering
5. ____ Marine Sciences
6 _____ Environment
7 _____Intelligent systems (for example sensors and robotics)
8. ____Others (Please specify)_____
9 ____Don't Know
10. ____ Refused

6. Which of the following factors do you perceive to be the **three** biggest obstacles to the growth of BC's science and technology industries (READ LIST).

1. ____Employee skill shortage
2. ____Lack of start up funding
3. ____Lack of research facilities
4. ____Corporate taxes
5. ____Personal tax rates
6. ____Labour costs
7. ____Cost of living
8. ____Education
9____Others (Please specify)_____
10____Don't Know
11. ____ Refused

7. Where would you look for information about science and technology in BC?

1._____Government agencies (Science Council / Ministry of Science Competition and Enterprise)
2. _____Organization (Science World, BC Museum)
3. _____Media (newspapers, magazines, television, or radio)
4. _____Internet
5. _____Business or Industry associations
6. _____Library
7. _____Others
8. _____Don't know
9. _____Refused

8. Which places, facilities or attractions in BC come to mind when you think of science and technology?

1. _____Science World (GO TO Question 10)
2. _____Pacific Space Centre/Planetarium
3. _____Royal BC Museum
4. _____Vancouver Aquarium
5. _____Playdium
6. _____Others (Please specify)_____
7. _____None/Don't Know
8. _____Refused

9. Have you ever heard of Science World?

Yes____
No____ (GO TO QUESTION 20)
Don't Know (GO TO QUESTION 20)

10 What types of products and/or services does Science World provide to the public?

1. ____ Tourist attraction
2. ____ Science education
3. ____ Fun place for kids
4. ____Omnimax theatre
5. ____Special feature exhibitions and displays
6. ____Others (Please specify)_____
7. ____Don't Know
8. ____ Refused

11. Approximately how many times have you and/or your family attended Science World **on your own** (i.e. not with a school or other tour group)?

1. ____Never
2. ____Once
3. ____2 times
4. ____3-5 times
5. ____6-10 times
6. ____ 11 or more times
7. ____ Don't Know
8. ____ Refused

On a scale of one to five, with one being "strongly agree" and five being "strongly disagree" please tell me whether you agree or disagree with each of the following statements:

12. Science World and its programs have positively influenced my attitudes about science and technology.

1____ Strongly Agree
2____
3____
4____
5____ Strongly disagree
6. ___ Don't Know
7. ___ Refused

13. Science World and its programs have increased my interest in science and technology careers.

1____ Strongly Agree
2____
3____
4____
5____ Strongly disagree
6____Don't Know
7____ Refused

14. In order to assist us in classifying the next few questions could you please tell me how many children you have, if any?

1. ____None (GO TO Question18)
2. ____1
3. ____2
4. ____3
5. ____4
6. ____5 or more
7. _____Refused

15. Approximately how many times have you (or your children) attended Science World with a school group?

1. ____Never
2. ____Once
3. ____2 times
4. ____3-5 tomes
5. ____6-10 times
6. ____11 or more times
7. _____ Don't Know
8. _____ Refused

16. Science World and its programs have positively influenced my children's attitudes about science and technology.

1. ____1 Strongly Agree
2. ____
3. ____
4. ____
5. ____ Strongly disagree
6. ____ Don't Know
7. ____ Refused

17. Science World and its programs have increased my children's interest in science or technology education

1. ____ Strongly Agree
2. ____
3. ____
4. ____
5. ____ Strongly disagree
6. ____ Don't Know
7. ____ Refused

18. Science World has made an important contribution to science and technology education?

1. ____ Strongly Agree
2. ____
3. ____
4. ____
5. ____ Strongly disagree
6. ____ Don't Know
7. ____ Refused

19. Something like Science World needs to be available for BC's young people to learn about science and technology?

1. ____ Strongly Agree
2. ____
3. ____
4. ____
5. ____ Strongly disagree
6. ____ Don't Know
7. ____ Refused

20. Public funds should be provided to encourage the development of science, technology and innovation

1. ____ Strongly Agree
2. ____
3. ____
4. ____
5. ____ Strongly disagree
6. ____ Don't Know
7. ____ Refused

21. BC needs a more technologically skilled workforce in order to compete?

1____ Strongly Agree
2____
3____
4____
5____Strongly Disagree
6____Don't Know
7. ___Refused

22. Science and technology are making life easier and better?

1____ Strongly Agree
2____
3____
4____
5____ Strongly Disagree
6____ Don't Know
7. _____ Refused

Now, I would like to ask you some demographic questions that will assist in classifying your responses. Your responses will be kept strictly confidential.

D1 Which of the following describes your age?

1____Under 25
2____25-34
3____35-44
4____45-54
5____55-64
6____65 or older
7____Refused

D2 Which of the following categories best describes your education?

1____High school (or less)
2____Vocational/technical
3____University

D3 Which of the following categories best describes your total household income before taxes for 2002?

1____Less than $25,000
2____$25,000 to less than $35,000
3____$35,000 to less than $45,000
4____$45,000 to less than $55,000
5____$55,000 to less than $65,000
6____$65,000 to less than $75,000
7____$75,000 or more
8. _____ Don't Know
9. _____ Refused

D4 Can you please indicate which Community you live in? _____

Okay, just a couple more items. First, could I please get your first name in case my supervisor calls back to confirm that this survey was actually completed and conducted according to directions.

First Name:

If they ask for additional information about this, you can tell them:
This is a quality control measure to ensure that our company's surveyors have not made up the answers on their completed surveys. We will verify a few answers to ensure the survey was conducted according to directions and ask if the surveyor acted in a friendly and professional manner.

And could I just verify your phone number, is it..._____(read off call sheet)

That is all the questions I have, thank you very much for your time and help in completing this research. If you have any questions about this survey, please call Rob Lauridsen-Hoegh, at the Science Council of BC, in Vancouver at 1-800-665-7222 Extension 276.

Thank you again. Good-bye. or Have a good day/afternoon/evening.

D5 Indicate Gender (Discern from voice)

1____Male
2____Female

FOR SURVEYOR: I certify that this survey was conducted according to all instructions. _____